PERSONNEL MANAGEMENT
WELFARE &
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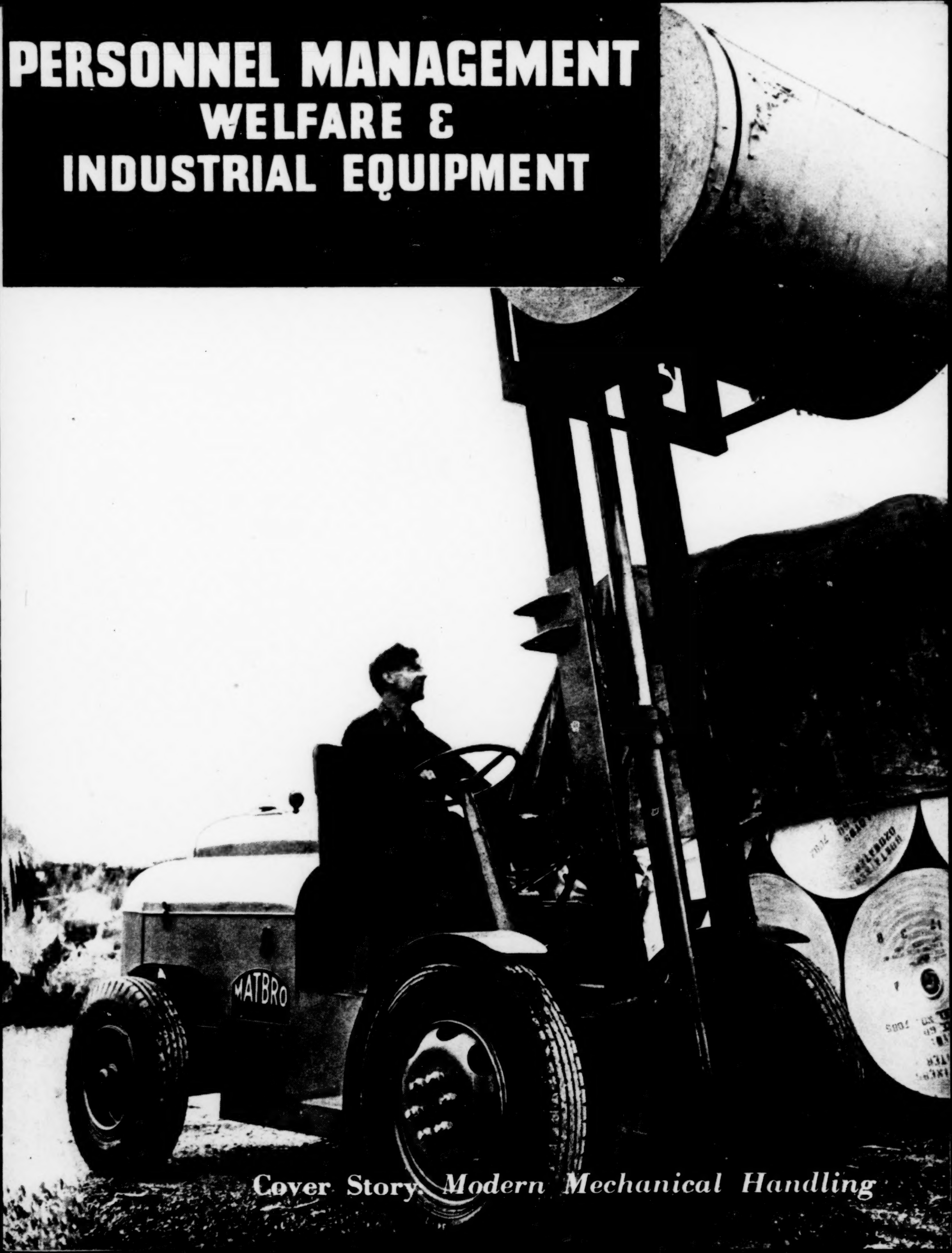

Cover Story: *Modern Mechanical Handling*

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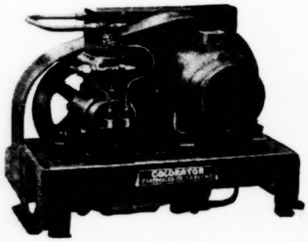

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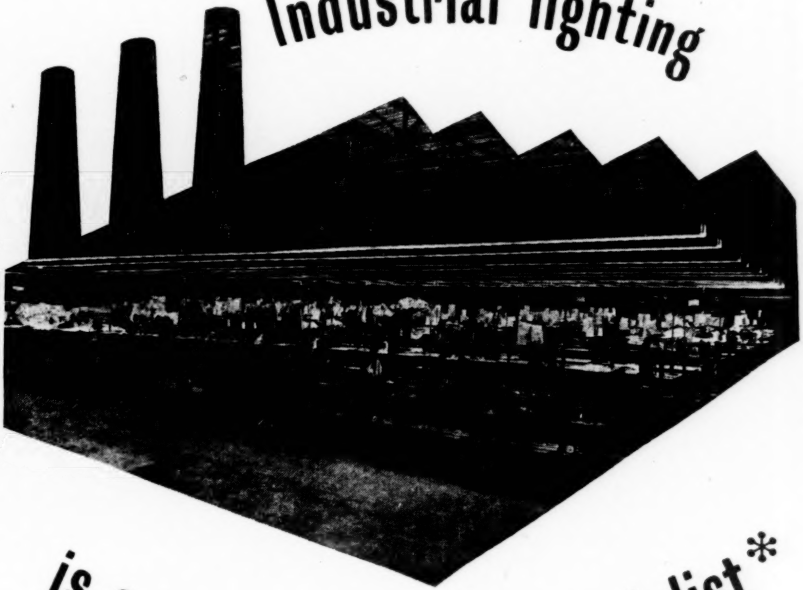

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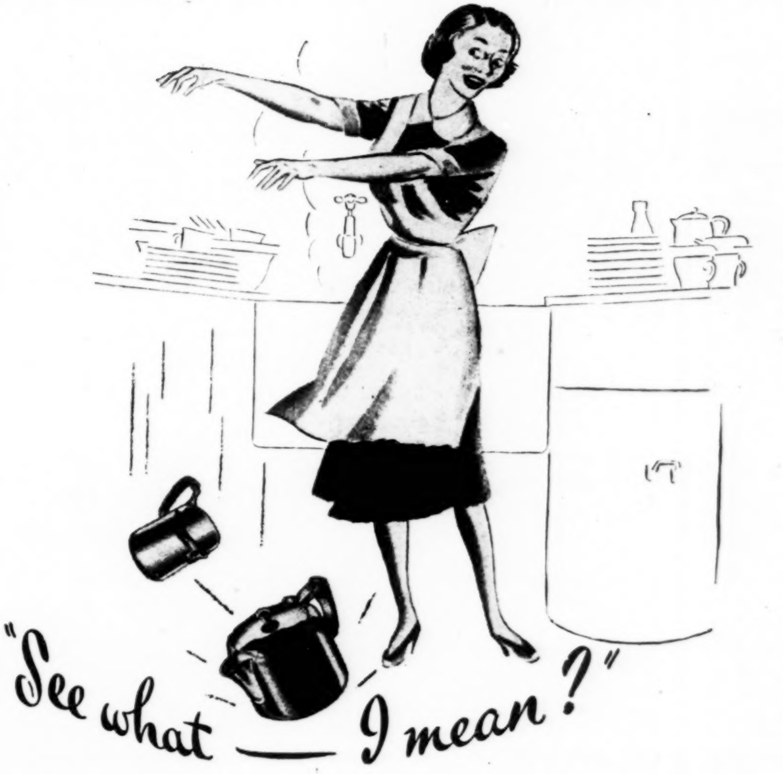
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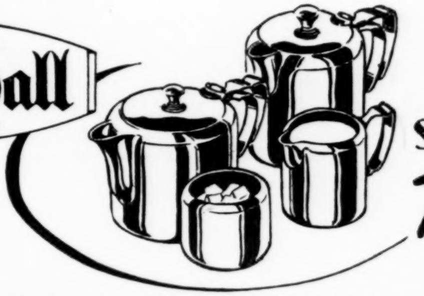

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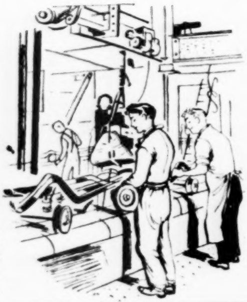

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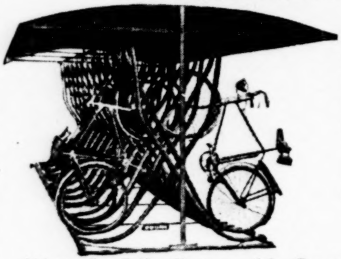

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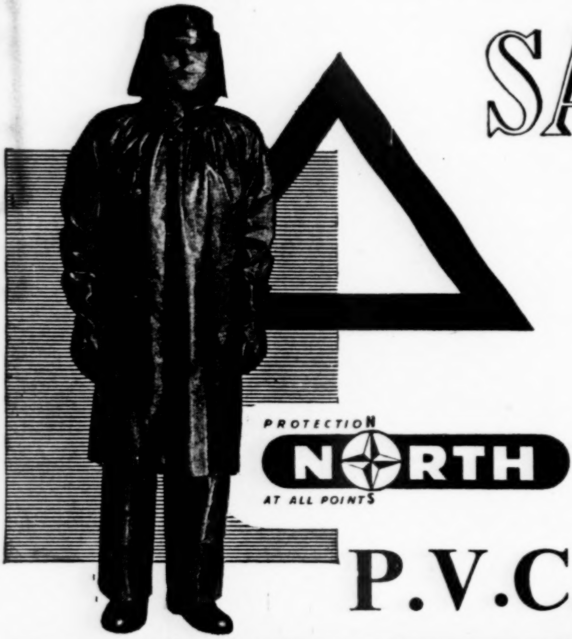

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May we send particulars?

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SANITARY TOWEL VENDING MACHINE

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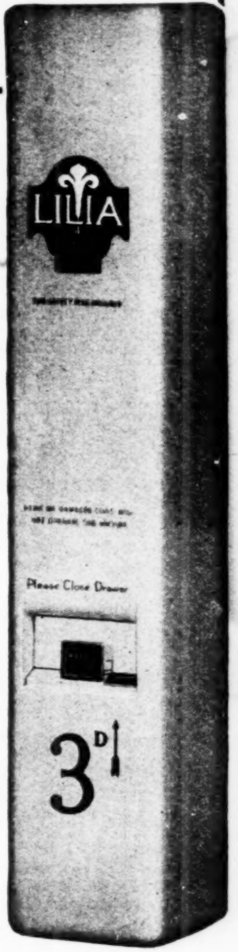

Welfare Officers in the most up-to-date factories are installing the 'Lilia' Vending Machine in women's cloakrooms. Women employees find it so useful to buy emergency supplies of 'Lilia' by this method. It saves endless embarrassment and inconvenience.

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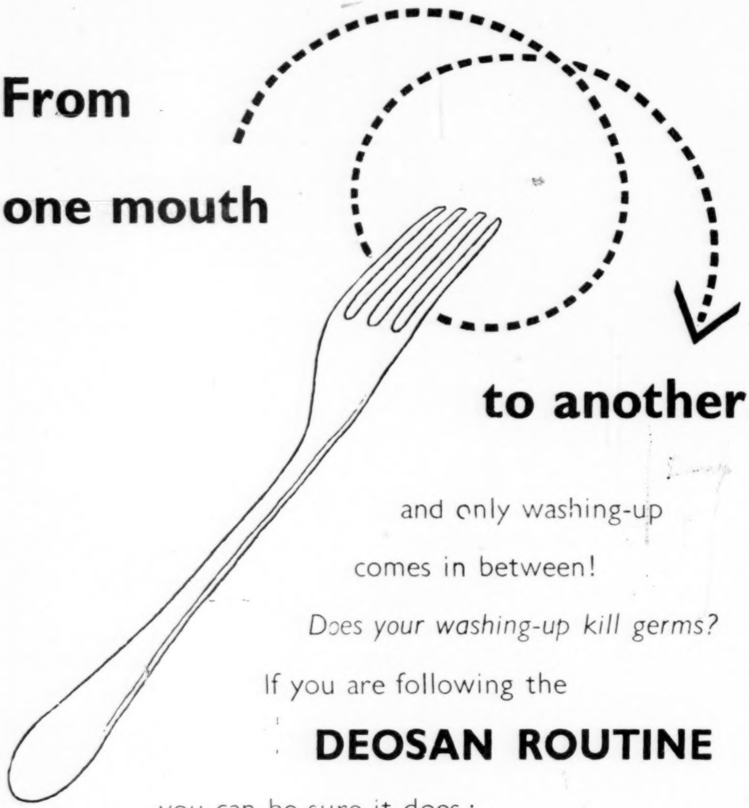
one mouth



to another...

and only washing-up

comes in between!

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PERSONNEL MANAGEMENT
WELFARE AND
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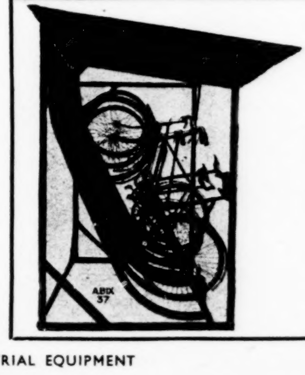

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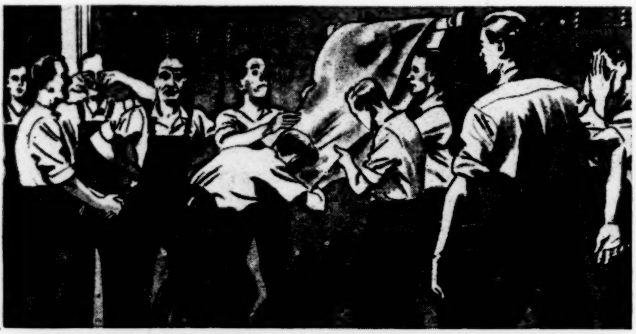
MEAN WAITING and CONGESTION
—Lost Man Hours—Transmission of Germs—Expensive Laundry Bills



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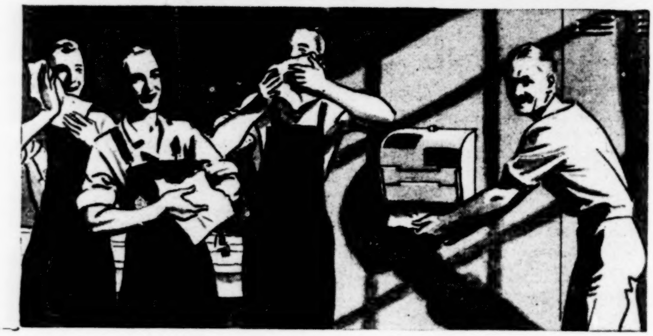

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PAPER TOWELS

WITHOUT OBLIGATION
Write or phone today for details or ask for a demonstration of Hi-Dri paper towels and further proof that they can help you cut absenteeism!

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Better Materials Handling

★ RAISES PRODUCTIVITY

★ CUTS COSTS AND FATIGUE

★ LOWERS ACCIDENT RISKS

★ IMPROVES WORKERS' STATUS

By JOHN R. SHARP
Managing Director, Lansing-Bagnall Ltd.

To get more output from our existing labour force (as we must do), men should be trained to work with their brains rather than their muscles, while machines supply the brawn. Human effort is still being wasted in the handling of materials and finished goods; yet there is a wealth of equipment, designed to do all types of handling jobs efficiently and cheaply, available in this country. A wide selection will be on view at the Mechanical Handling Exhibition, Olympia, this month.

IF a greater number of people are to have a greater proportion of the goods of this world, a tremendous increase in the production of these goods has to be achieved by the efforts of the same total labour force that exists today. As far as this country is concerned, the striving for greater production has resulted in visits being paid to the United States by no fewer than sixty-six productivity teams, under the auspices of the Anglo-American Council on Productivity. So far forty-seven of the teams' reports have been published, and almost without exception these reports give *better methods of movng materials* as one of the principal reasons for America's vast productivity. It is phenomenal, the way the Americans place horsepower at the disposal of their operators. There is an estimated 6 to 7 h.p. per operator in the U.S.A., as against 1½ h.p. in this country and 1 h.p. on the Continent.

Next, look at costs. Handling adds only to the cost, and not to the value, of a product. The *Materials' Handling in Industry Report* states that from 15 to 85 per cent of the cost of any product—i.e., 3s. to 17s. in every £—is absorbed in materials' handling. This is no exaggeration, nor should one think that the figures could not possibly apply to one's own firm. One of the most efficient production companies estimated the handling costs in one of their factories at 5 per cent. When, after persuasion, they investigated these costs, they were staggered to find that the figure was more than 25 per cent.

The main objectives, then, of a properly integrated system of materials' handling are to serve manufacturing plants and distributive organisations with the maximum efficiency and, at the same time, to reduce costs to a minimum. But such a system brings other advantages:

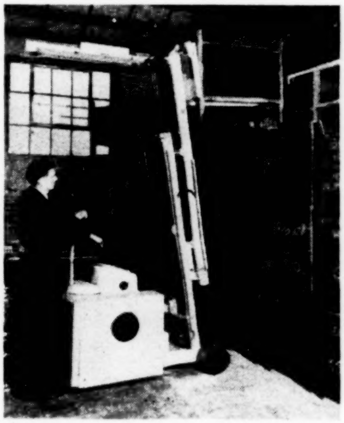
(i) Improved working conditions and a better status for those employed in moving materials;

(ii) Fewer injuries from manual operating, lifting and moving;

(iii) Better use is made of existing buildings. Building extensions that seemed imperative become unnecessary as full use is made of "air rights," or cubic capacity. How? By eliminating every non-essential movement of materials, and then performing the essential movements by the best mechanical method—gravity chute, roller conveyor, monorail hoist, or industrial truck;

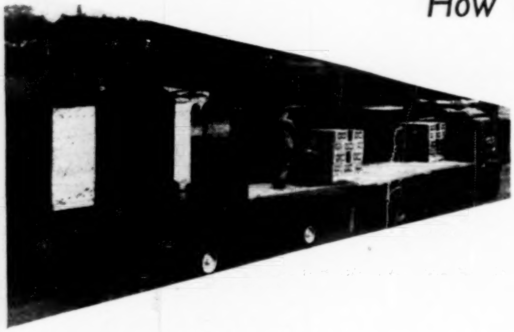
(iv) Production machines that appeared to be needed, are proved to be unnecessary. Materials can be taken to the operator, and his processed products disposed of, so much more quickly; and he can be saved the manhandling he had to do previously. Result—greater output per machine and operator;

(v) Working tempo goes up, worker fatigue is reduced. Overtime is eliminated, yet increased pay is possible. It is quite extraordinary how a tidy shop, with the minimum



Space-saving stacking of engineering parts with the aid of a pedestrian-controlled fork lift truck.
(Lansing-Bagnall Ltd. photo.).

How Good Handling Saves Money



The new mobile loading platform is a boon where no permanent platform exists. *(Lansing-Bagnall Ltd. photo.).*

LOADING A RAILWAY WAGON WITH PALLET LOADS OF TINPLATE—

EQUIPMENT	MEN	TIME Actual	 Man Min.
Previously:			
1 specially made hand truck (hitherto thought ingenious)	4	32 min.	128
Now:			
1 power pallet truck ("Tin-plate" model)	1	8 min.	8

amount of materials flowing easily through it, produces an automatic reaction from the worker. There is always a brightening of the labour outlook when the heaving and pushing of heavy loads on sack barrows or hand trolleys gives way to a modern mechanical method.

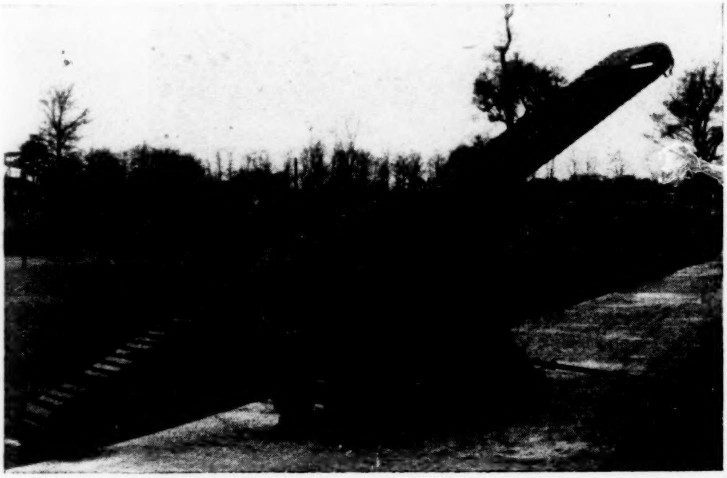
So much for the advantages brought by a good materials' handling system. How to achieve one? Each industry—and, in fact, almost every firm in each industry—has its own peculiar conditions; therefore one can only state principles of general application:

1. One man, or one department, should be responsible for all materials' handling, including planning and improvements.
2. Each handling operation should be closely scrutinised and co-related with inspection and storage, so that every unnecessary movement is eliminated.
3. Methods of handling should be constantly surveyed to see whether further improvements can be made.
4. Like production machines, handling equipment needs periodic replacement by more modern types.

The Mechanical Handling Exhibition, which is being held at Olympia, London, from June 4-14, demands a visit from every individual whose job is in any way concerned with the movement of materials. So frequently people are under the impression that some of the newer types of materials' handling equipment are only obtainable from the United States for dollars. At Olympia one will see that, with hardly an exception, all such equipment is now made in this country.

The many British fork trucks, which have negotiated their trials and teething troubles and emerged with flying colours, will be there in great variety, from the pedestrian-controlled type to the really heavy models, handling loads up to 7½ tons. Considerable attention is now being given to the numerous attachments that make the fork truck an even more versatile tool. Among those of particular interest is the squeeze clamp. With the aid of this device, many users will be able to reduce considerably their need for pallets. The squeeze clamp grips, by hydraulic power, both sides of a load of stacked goods, and by squeezing from either side with the right predetermined pressure, the unit load can be lifted from the ground and loaded or stacked.

A new development has been made recently to enable pallet loads to be loaded or unloaded from rail wagons to a lorry, or from lorry to lorry, with the aid of a power pallet truck, where no platform or loading bank exists. This is the mobile loading platform, which is illustrated. With the aid of a further folding ramp the load movement can go to and from ground level.



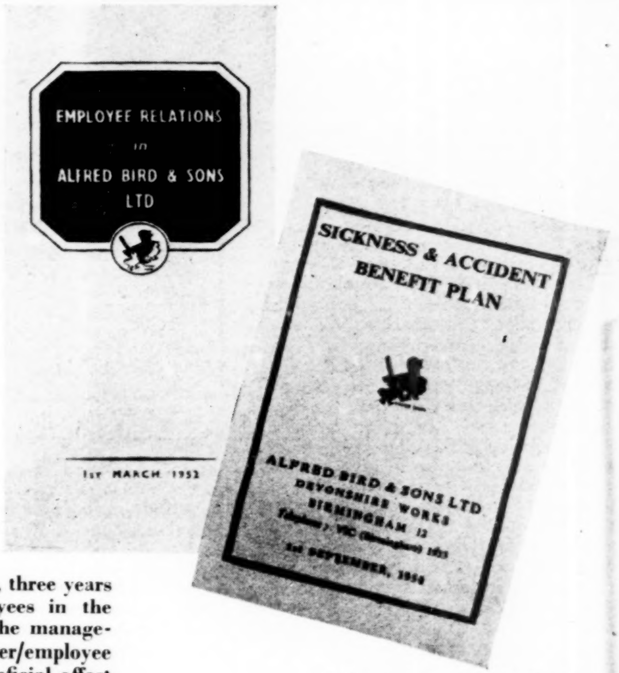
Portable hinged boom conveyor with inverse drive, permitting continuous track to operate freely on both booms, which can, however, operate independently. *(Fourways (Engineers) Ltd. photo.).*

This Personnel Policy Improved Supervision and Employee Co-operation

By MAURICE G. PATE

Personnel Manager, Alfred Bird and Sons, Ltd.

When they replanned their personnel organisation, three years ago, this company decided to put their employees in the picture by means of a booklet stating what, in the management's view, were the principles of good employer/employee relations. The booklet has not only had the beneficial effect headlined above, but as the article shows it has constituted the core around which the whole personnel organisation has been built, with good results.



Good internal publicity. These two booklets tell employees all about their rights—and obligations.

TAILORING a modern personnel policy to fit the needs of a growing business is the job which has been undertaken at Alfred Bird and Sons Ltd., makers of Bird's custard, for the past three or four years. Established 114 years ago, Bird's as a family business did not have a formal personnel organisation, but when the company became a part of General Foods Corporation, New York, the need for a complete and fully-developed personnel division began to be felt.

The personnel division came into being in June, 1949, and one of the first jobs was to prepare a draft statement of the principles of personnel administration and employee relations to be addressed to all members of the organisation. Work on this draft went on for many months, alongside the development of other parts of the personnel function. It was based on a booklet issued by General Foods Corporation to all its employees, which was adapted to suit our own circumstances. It was realised that it would be essential to ensure that the structure of the organisation was clear, and much work was done to make sure that responsibilities and authorities were clearly understood, and that the line of authority was properly defined.

In the process we found that some people had two or more bosses, and others were not at all clear as to whom they were responsible. A complete organisation chart was drawn up. It was then broken down into departments and sections, and a copy of the relative part of it, clearly showing the line of authority from the supervisor of each section right up to the managing director, is displayed in each department and section of the organisation.

The draft booklet was first discussed by the managing director and five divisional managers: the heads of production, sales, accounting, buying and personnel. When agreement was reached at this level some copies were printed and put before group meetings of all supervisors down to and including leading hands. The company have approximately 116 supervisors, and for the purpose of these meetings they were divided into eight groups. Two meetings with each group of supervisors enabled us to go through every section of the booklet in complete detail. Numerous amendments were suggested, and many of them were incorporated in the final statement.

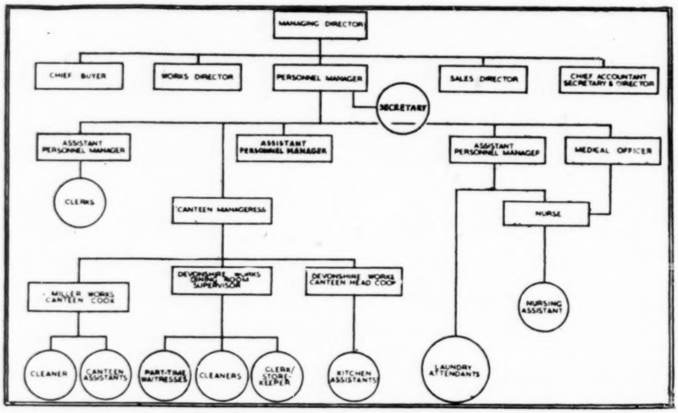
Supervisors Explain

After printing, the booklets, with a covering letter from the managing director, were handed to supervisors to distribute to the employees in their charge. This was done at meetings held by the individual supervisors with their workpeople, so that the supervisors were able to explain the contents of the booklet and answer questions. It may be noted that there was no direct consultation with operatives or their representatives during the drafting of this booklet, the reason being that to date we have no formal joint consultative machinery. It is something which we may consider in the future.

The booklet outlines the principles of good employer/employee relations: "The company desires and needs the co-operation, interest and loyalty of all, so that this business may be conducted efficiently in a spirit of friendliness with all employees happy in their work relationships and well informed regarding the enterprise in which all are sharing. It is a function of every individual to aid in the attainment of these principles." It covers the principles of organisation and administration, procedure for the handling of differences and misunderstandings, employment, hours of work, wages and salaries, working conditions, and benefit plans.

Laying down these principles, and making them known to every employee, is, however, only a beginning. Success depends upon everyone doing his best to carry them out. It is widely realised that we need not only this set of principles, but we need to live them in our day-to-day contacts throughout the organisation. One of the ways in which this will be achieved is in training, especially throughout all grades of supervision. All supervisors have taken the T.W.I. courses on job relations and job instruction. The third, on job methods, will be following quite shortly.

In addition, we have a safety training course for supervisors which we are hoping to modify and make applicable to all operatives. For our salesmen we have provided a one-week training course, planned by our sales manager. The company have recently started to introduce school leavers into the factory by means of a 12 months' training course, covering many different jobs before final placement in the job best suited to the individual.



To ensure that each employee knows to whom he is responsible, an organisation chart is displayed in each department. This is the personnel department "family tree."

The company's employment policy provides for promotion from within wherever possible. All vacancies are notified on noticeboards, and an opportunity given for existing employees to apply before outside sources are notified.

8 Point Personnel Policy

The booklet tells employees about:

1. **Organisation.**
2. **Administration.**
3. **Differences and misunderstandings.**
4. **Employment.**
5. **Hours of work.**
6. **Wages and salaries.**
7. **Working conditions.**
8. **Benefit plans.**

Termination Allowance

From time to time, as in any other organisation, it becomes necessary for an employee to leave the company at the instigation of management, either because of redundancy, for health reasons, or because of inability to meet the requirements of the work; and to provide against this eventuality a termination allowance has been instituted.

Under clearly defined rules, an allowance, to act as a tide-over until other employment has been found, is payable to an individual who leaves the company for one of these reasons. It is an allowance based upon age and length of service, on a scale designed to give from one to fifty-two weeks' salary on average wages, in addition to whatever payment may be due for remaining annual holiday or in lieu of notice.

Holiday arrangements have similarly been clarified under a holiday plan, with all relative details incorporated. Broadly speaking every employee receives two weeks' annual holiday with pay after having served nine months, and in addition, all employees with 15 years' continuous service receive an additional week's holiday with pay.

Among the principles laid down is the provision of good working conditions. This is especially important in a food factory where maintenance of high standards of hygiene both of the operators and the workplace is essential. A first-class surgery is available to all employees. The company's medical officer is in attendance three mornings each week and conducts a pre-employment medical examination while two nurses are on duty during factory hours. A chiropodist attends once a week, and gives treatment at the company's expense to all employees, upon the recommendation of the doctor.

All employees are required to report to the surgery for attention to even the most minor of cuts or scratches, to ensure that fully adequate treatment is given. Bird's have few serious accidents, but nevertheless the accident rate has been considerably higher than desired, and a comprehensive safety programme is being run to reduce it. The safety committee consists of equal proportions of representatives elected by the workpeople and nominated by management. All departments are represented, and members are replaced annually to allow as many people as possible to gain experience while serving on this committee.

Modern, well-equipped cloakrooms, with individual lockers for each person, including showers for men and bathrooms for women, have been completed very recently. The bathrooms in particular have been much appreciated, in an area

(*Continued on page* 523.)

Safety in the Smaller Firm—3

How to Use Statistics

By ROBERT McKOWN, *formerly Editor, British Journal of Industrial Safety and Industrial Accident Prevention Bulletin*

Of the six essentials of a works safety organisation, five have already been discussed in previous articles. There still remains the sixth—the keeping of adequate statistics to show what progress has been made and what hazards most need attention.

FOR the safety officer, the purpose of statistics is to provide *useful* information about what is going on in the works. There is no point in compiling and analysing a lot of figures which either tell him nothing useful or nothing that he could not have found out from his own observation. This may seem obvious, but figures have such a fascination for many of us that there is sometimes a tendency towards what may be called "statistics for statistics' sake."

One figure which is certainly useful—many would say essential— is an index of whether accidents are increasing or decreasing in relation to the total number of man-hours worked. Most readers will already be familiar with the standard frequency rate which, in this country, is obtained by calculating the number of lost time accidents per 100,000 man-hours worked. For the purpose of this calculation, a lost time accident is defined as one which either (*a*) causes the victim to lose time beyond the day or shift on which it occurs or (*b*) necessitates his transfer to some other type of work, either permanently or temporarily.

As the avowed object of industrial safety organisation is to prevent *all* accidents, however minor, it is sometimes suggested that every one should be included when calculating the frequency rate. Ideally this is true, but in practice there is an objection. If a man has a minor injury dressed in the ambulance room and then goes back to his work, the accident will probably be recorded; but if he dresses it himself at the nearest first-aid box it will almost certainly go unrecorded. A frequency rate calculated on the basis of such minor accidents would therefore depend for its accuracy on whether or not the injuries were dressed in the ambulance room and so placed on record. Obviously the standard of accuracy would then vary not only from works to works but from department to department.

If, however, the result of an accident prevents a man clocking-in on the next day or shift, or necessitates his transfer to other work, there should be no question of its going unrecorded. The lost time accident therefore represents the most reliable basis on which to calculate a frequency rate. It may not be ideal, but it is practicable.

Calculating Frequency Rate

Unfortunately, the standard frequency rate, when used in the smaller works, has a disadvantage which may tempt managements to adopt a different basis of calculation. Owing to the workings of what statisticians call the Poisson Law, the number of accidents in any given year is liable to be slightly over or slightly under the average—assuming that other conditions remain constant. Thus, if there are 1,000 accidents in ten years, giving an average of 100 a year, the actual number in any given year may vary between 85 and 115 without indicating any change in the standard of safety. The smaller the number of accidents, the greater the limits within which the annual figure may vary, so that a firm with only 100 employees and an average of seven lost time accidents a year, might find its frequency rate varying between 1.5 and 5.5 without connoting any real change in the progress of the safety campaign.

Confronted with this fact, managements of smaller works may feel inclined to compile a frequency rate based on ambulance room figures, since this would mean a higher annual average and therefore a narrower margin of variation. Such a practice is not advisable. Figures compiled on this basis could not be compared with those for other firms, since the frequency rates published annually by the Factory Department and by Ro.S.P.A. are based on lost time accidents.

A more serious objection is that, if sepsis is to be kept down to a minimum, the supervisory staff must do all they can to encourage the use of the ambulance room even after quite small injuries, and they will be less likely to do this if they know that the management is using ambulance room figures as an index of efficiency in accident prevention. (There is, of course, no reason why the safety officer should not study ambulance room records to obtain information about causation and types of accidents, but this is not the same thing as using such records in compiling a frequency rate.)

The best course, therefore, is to calculate the annual frequency rate according to the standard system and to acquire a sufficient working knowledge of the Poisson Law (it is not too involved) to enable a distinction to be made between variations due to chance and variations which definitely indicate an improvement or decline in the standard of safety. Even if a year-by-year comparison does not give much guidance, the total picture which will begin to build up after a few years will give a reliable indication of accident trends.

Apart from the frequency rate, the statistics most likely to be of use are analyses of accidents by type (machinery, falls, etc.), by department and by nature of injury. For example, if it appears from the figures that a particular department is producing a large proportion of eye injuries, this should prompt an immediate enquiry and may result in the discovery of a hitherto unsuspected eye hazard.

In analysing accidents by types, the same headings can be used as those in *Appendix III* of the Chief Inspector's report. This will enable the safety officer to see whether the distribution of accidents in his own works differs notably from that compiled for the industry as a whole, and may prompt enquiry as to why a particular type of accident (e.g., injuries from hand tools) is more prevalent than is normal for the industry.

How Films Can Help in Industrial Training

By E. MITCHELL GREENWOOD

Film Distribution Officer of a well-known Industrial Organisation

For the study of industrial methods and techniques, and for putting over background information, films have several big advantages over other methods of training. But to get the best out of them, training films must be carefully chosen, previewed and presented.

THE bursting of an electric light bulb happens so quickly that the transition from entity to fragments is normally imperceptible. By the aid of cinematography, however, the movement of the fragments during disintegration can be seen quite clearly. Conversely, the unfolding of a flower from the bud stage, ordinarily too slow for normal perception, can be accelerated and thus seen by the human eye. These two examples show how film can be unique as a means of demonstration; but there are many other ways in which film, even if not unique, can be superior to other methods of demonstration.

A close-up view of some process, for instance, may be screened simultaneously to many people, whereas the actual demonstration owing to size and space limitation could not possibly be seen by more than two or three at a time. An experiment or process might be difficult to repeat at will whereas, captured on film, it can be shown over and over again.

The training value of films may be broadly grouped under five headings:

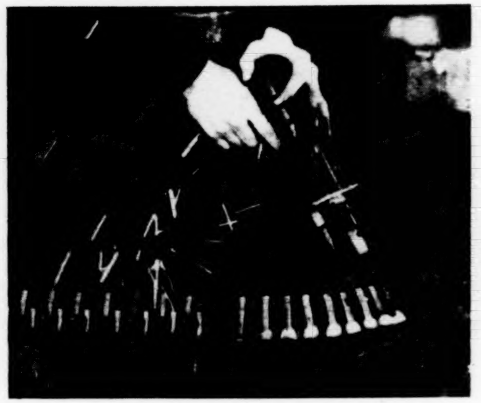
(1) Staff induction.
(2) Staff instruction in general matters such as safety, hygiene, etc.
(3) Background information to supplement specialised instruction, e.g., about industry in general or about particular industries.
(4) Specialised training in efficiency subjects such as work study, production methods and safety economy.
(5) The study of actual methods and techniques.

Anyone contemplating the use of films in an industrial training course must first make sure that suitable films will be available. It is possible of course, to produce films specially for the purpose in mind, but production costs—especially of sound films—may be too high for any but large organisations. The alternative is to rely on existing material which is, for most industrial subjects, plentiful. Some of this consists of sponsored films which are available either on free loan or by outright purchase—often (by courtesy of the sponsor) at print cost, on condition that the use is limited to the purchaser's special requirements.

Other films are distributed on a commercial basis from libraries such as Gaumont British, Lexicon Films Ltd. (Encyclopædia Britannica), and the National Foundation for Visual Aids. Hire charges average about 7s. 6d. per day for a ten-minute film. Copies of these may be available for outright purchase (again for restricted use), but the price will include a margin to cover production costs, so that the charge will be considerably more than print cost. An example of this is the film "How to Avoid Muscle Strain." This is sold quite properly at a commercial price of £25, whereas the print cost would probably be under £10.

There is no complete catalogue of industrial training films, and prospective users must therefore search for suitable films (a) by consulting any lists which may have been compiled by appropriate sectional interests, and (b) by enlisting the aid of some of the better known sources of information who if they cannot give any positive help, often become stepping stones by suggesting other likely contacts. The British Film Institute have an excellent service, which deals with requests for either titles or subjects. The Scientific Film Association, too, not only issue a catalogue but can often give information about films not listed. Librarians often have a knowledge of films dealing with subjects not covered in their own library. The

Joint consultation has been dramatised in the film "Nines Was Standing," produced for the National Coal Board.



Studs being welded to a curved section of boiler pipe; a still from "Welding and Boiler Manufacture." (Babcock and Wilcox Ltd.).

Film User carries a monthly series of 16 mm. film reviews in addition to its information service on specialised films. Trade journals often have the most up-to-date information about films dealing with matters pertaining to their particular interest. These are but instances of possible information sources. There are many others far too numerous to mention here. Again, many training films are made abroad, and enquiry at the embassies and legations will often prove fruitful. The American embassy has a considerable knowledge of the films used so extensively for training in the United States.

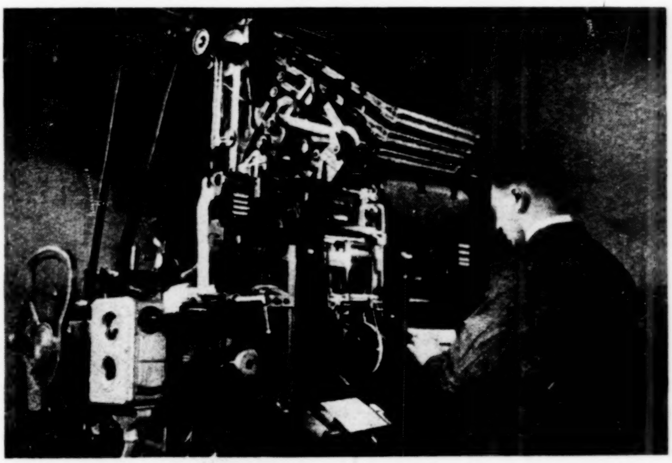
Having located your films, *preview them with great care.* One of the main advantages of film is that it conveys many items of information to a variety of intellects; one of the disadvantages is that one cannot easily forecast exactly what effect will be achieved on those whose outlook or mentality differs from that of the makers and sponsors of films. There is a story of a film which used the American technique of showing two operators working simultaneously at a job, one using the old method, the other an improved technique. The film demonstrated how the improved method resulted in the job being done appreciably faster, so that the operator finished her task and sat at rest while the other girl was still working. One reaction was that the fastest worker had so tired herself that she was compelled to rest!

When it comes to presentation, many of the refinements of the commercial cinema are superfluous and, indeed, impossible in the factory cinema; but remember that the "frills" are provided for a purpose—to assist viewers to see films with undivided attention. This has a bearing on industrial training film showings. For example, the question of daylight or darkened projection is bound to arise. Daylight projection has several classroom advantages, but at the same time can never hope to achieve the perfect concentration of normal film viewing in darkness. The brightest picture is naturally obtained when the black-out is complete. Unfortunately, under the improvised conditions which apply to most users of film in training courses, this may mean inadequate ventilation, which might have a soporific effect and so defeat the value of the properly lit picture. In such cases the discomfort of hard seating might have some compensation.

It would be out of place to deal with projection here as it may be assumed that the lecturer will call on a trained projectionist. There are, however, two other points of presentation which, although partially the projectionist's concern, often fall into the lecturer's sphere also. The first is the size of the screen. This is governed by two factors—the throw (the distance from projector to screen) and the focal length of lens. Focal length is usually 2 in., but if the throw is restricted, a larger picture can be obtained by using a 1¾ in. lens. If a large room is available, the picture size can be kept smaller (thus maintaining picture brilliance) by using a longer focus lens. Details can be obtained from the accompanying table.

Distance from Screen (in feet)	*Width of Picture (format 4 × 3 approx.)*		
	1½ in. Lens	2 in. Lens	3 in. Lens
10	2 ft. 6 in.	1 ft. 10 in.	
15	3 ft. 9 in.	2 ft. 9 in.	1 ft. 11 in.
20	5 ft. 0 in.	3 ft. 9 in.	2 ft. 6 in.
30	7 ft. 6 in.	5 ft. 6 in.	3 ft. 9 in.
40		7 ft. 5 in.	5 ft. 0 in.
50			6 ft. 3 in.

The second point concerns sound films. For these, the loudspeaker should be placed as high as possible. This policy will ensure that difficulties arising out of bad room acoustics will be kept to a minimum.



Made to show to apprentices in the printing trade, "Modern Linotypes" pictures latest developments in this machinery and demonstrates how linotypes work. (Linotype and Machinery Ltd.). *(Photographs by courtesy of Film Producers' Guild.).*

"Fireside Chats" Educate Employees

ADVOCATE of the "fireside chat" technique is the managing director of Pond's Extract Co. Ltd., who calls his 450 employees together periodically during working hours, and gives them a simple picture of what the company is trying to achieve and their part in it.

These talks are always illustrated by models or charts, and one of the most impressive meetings was the ceremony of the cutting of "the cake that you cannot eat and have." A dummy cake was marked into segments representing the proportion of the company's income that went into raw materials, wages, taxes, etc. Col. Wenham, the managing director, cut the cake and then called upon the chief buyer to receive his share for raw materials, then the wages slice was handed over, and the shareholders' slice, etc., until one large slice remained. Then the Customs and Excise officer was called upon to collect this slice for taxes. When nobody moved, Col. Wenham said: "You see, they're ashamed to come and get them in public." On another occasion, the same topic was illustrated by dummy coins, representing the breakdown of each £1 of the firm's revenue.

When a profit-sharing scheme was introduced recently, the managing director wanted to explain that profits depended upon people taking a real interest in their work. At a staff gathering, a curtain was pulled aside to reveal four men and one woman wearing masks and hats. The hobbies of each were described: one was a radio fan; one backed horses; another went in for "pools;" one was a film fan; and the other a gardener. Posing the question as to what went on in the backs of people's minds as they worked, Col. Wenham asked these actors to turn round. They removed their hats, each revealing a card on the back of the head. One card indicated radio, the next horse racing, the next football pools, the next films, and the last—a jar of Pond's cream. The last man, explained Col. Wenham, was the man they were looking for; his mind was on his job, as well as on his hobby.

(Condensed from *The Director*, 4/52.)

Space Maker

THEY have made 49,300 sq. ft. of extra working space at the Boeing Airplane Co.'s Seattle works by hanging balconies over production areas. Six balconies of varying sizes ranging from 1,200 to 34,000 sq. ft. have been erected by the firm's own maintenance staff with the help of outside contractors. Additional footings were needed to accommodate new columns, and in certain areas the roof had to be raised, but building alterations were kept to a minimum.

These balconies now house the tool engineering department, stationery stores, physical research and industrial engineering departments, etc.

(Condensed from *Factory Management and Maintenance*, 1/52.)

New Pension Scheme

A PENSION scheme for hourly-paid employees has been introduced by the Northern Aluminium Co. Ltd., based on joint contributions by employees and the company. Pensions are payable at 65 for men and 60 for women, the amount depending upon length of service and the member's wages for the year before retirement. In addition, life assurance benefit of approximately one year's wages is payable to employees who die before retirement, and half this benefit if they die after retirement age.

Partners Share £36,000

EMPLOYEE-SHAREHOLDERS met recently at Richards Tiles Ltd. to distribute profits totalling £36,000. Total dividend for 1951—9½ per cent—represented an additional five-and-a-half weeks' wages to the average shareholder. Since the scheme started, the firm has paid out £103,000 to employees.

Individual dividend depends on length of service and attendance record. An extra 2½ per cent is earned for five years, and a further 2½ per cent for each succeeding year up to fifteen years, to a maximum of 25 per cent.

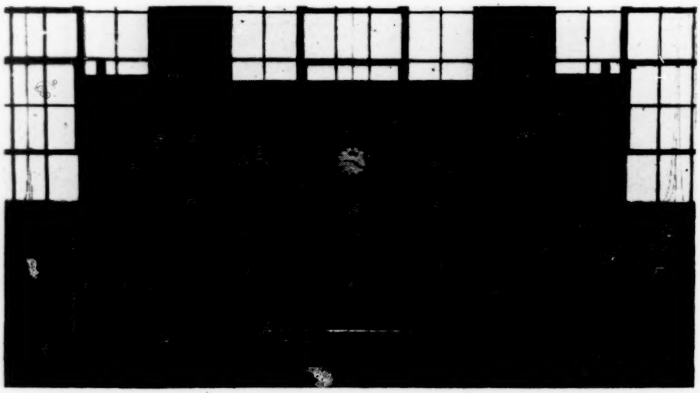
The qualifying period has now been reduced from two years to eighteen months, so that more employees are eligible, for the management are convinced that the scheme helps to break down the old barriers between workers and management, and creates a feeling of common interest in the success or failure of the firm.

Putting Over Safety

ALTHOUGH a small firm, Ansul Chemical Co., Marinette, U.S.A., believe in putting over safety "big." As a result, for seven of the past ten years, employees have earned a safety bonus of a day's pay each for getting through the year without a lost-time accident. At the end of the year, employees get a note asking them to include in their New Year resolutions a pledge to "think safe, work safe, and be safe in 19—."

Safety is based on personal contact. The safety officer consults with the foreman who consults with his operative, so that interest and co-operation are secured right down the line. The company provides sickness and accident benefit, but does its best to make sure that they will not be needed. It provides safety goggles free of charge, and pays half cost of safety boots; if

MORE SUGGESTIONS ARE WANTED



To stimulate interest in their works suggestion scheme, Brook Motors Ltd. held an exhibition in the canteen. Since the scheme was started two years ago, about 500 suggestions have been received and a high percentage accepted.

either are damaged by accident the company replaces them free. A quarter of all employees are trained first-aiders; the goal is 100 per cent. Wives of employees are also being offered first-aid training courses. A doctor is available three mornings a week, and a trained nurse is on duty full-time. Every employee receives an eyesight and hearing check once a year, while 75 per cent of employees have taken advantage of free tetanus toxoid shots, a preventive measure against lockjaw.

(Condensed from *Safety Maintenance and Production*, 4/52.)

Beauty Routine

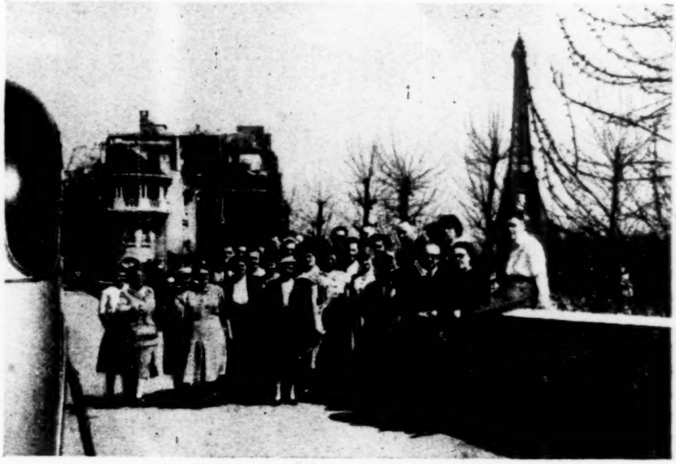
GIRLS employed by I.C.I. Ltd., Dyestuffs Division at Linlithgow, go through a daily "beauty routine" before starting work. Outdoor clothes are discarded and clean nylon overalls put on. Clean white canvas shoes and special turbans to cover the hair are also provided by the firm. After the girls are dressed they go to the powder-room for a thorough wash. Cosmetics—cream, powder, lipstick and nail varnish—are provided free by the firm.

Initiative Tests

A MERIT award scheme, which includes an initiative test for apprentices, has been instituted by Reynolds Tube Co. Ltd. The "best apprentice of the year" is picked on the basis of technical college reports, work reports from departmental heads, practical tests involving model making, timekeeping, physical training and initiative tests.

In the initiative test, each apprentice was given a rendezvous 40 miles away, and the sum of 5s. They had to reach the place by walking or hitch-hiking. Although the test was voluntary, all the boys took part, and all arrived safely, although two of them had to walk over 20 miles to complete their task.

THEY ENJOYED PARIS IN SPRING



Over 320 employees from the Whitton Engineering Works of the General Electric Co. Ltd. enjoyed a holiday in France and Belgium at Easter. Arrangements for the trip included the chartering of a special ferry for the cross-Channel journey.

Ideas & News from House Magazines

The Perfect Secretary

Five executives at head office of Richard Thomas and Baldwins Ltd., listed the following as the qualities they desired in "the perfect secretary."

Efficiency—the most important attribute. Then came *reliability, tact, loyalty, punctuality, a sense of humour, charm,* and *good appearance.* Other important qualities are *discretion, enthusiasm, courtesy and willingness,* and *courage*—"to ask her boss if she doesn't know." **(Ingot News.)**

Spreading It Abroad

The idea of the Sons of Rest workshops, started by Rubery Owen and Co. Ltd. for their workers of pensionable age, has been copied by the Atlas factories of Copenhagen.

"Senior workers," as the Danish version are called, are paid at current rates; when they are not working they can use the clubrooms and gardens attached to the workshops. **(Goodwill.)**

Orchids for the Ladies

A dinner, in honour of 109 employees of the David Brown tractor group who were not once late or absent in 1951, was held in Huddersfield recently. The total represents an increase of 25 per cent over the previous year's figure. In addition to the certificate awarded annually, employees completing three years' perfect attendance received inscribed tankards, while barometers were awarded for six years, and clocks for nine years. The eight women among the 1951 recipients also received sprays of orchids from the managing director. **(News Letter.)**

TRAP 4 SAVES HOURS

At least ten hours a week in man-handling of crates has been saved by this foreman in the dog-chain department of Aston Chain and Hook Co. Ltd., Birmingham. Crates for despatch had to be taken by truck on a circuitous journey to a section of the department which, although only a few yards distant, was obstructed by a partition. The foreman cut a "trap" in the partition, and laid a length of roller track below. Now the crates go straight through the "trap" in a matter of seconds.

First C.D. School for Waterworks Staff

By DENYS HAMILTON

In its first ten weeks, the South West (No. 7) Region Waterworks Civil Defence school trained 300 volunteer students to do a highly specialised wartime job—keeping our water supplies going after bombing. In spite of a diffident start, the organisers of the school soon had a waiting list of volunteers. Why? Because instruction was of a high standard and "admin." worthy of the Services at their best.

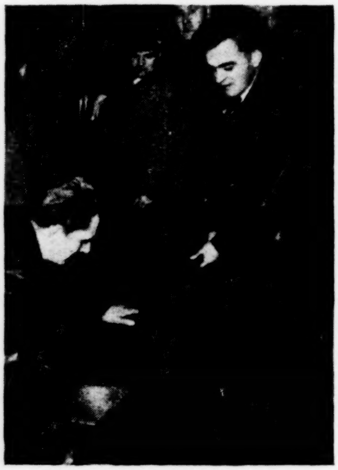
WITH its rooms laid bare—like so many British homes during World War II—to the onlooker's gaze, the three-storey house is a scene of fiery destruction. A brilliant red flash—and a staircase falls in. Another flash—and the walls of a room collapse. The conflagration spreads. Ceilings descend with a crash, another staircase goes, another wall. . . . Soon all is chaos in what was a well-ordered domestic interior. The red glow is reflected in thirty pairs of eyes, rapt but strangely unmoved by the destruction.

This is no display of callous indifference, however. The thirty spectators are students at the South West (No. 7) Region Waterworks Civil Defence training school, and they are learning how to tackle a fire in a house which has been hit by incendiaries. The house they are looking at is a model, constructed with ingenuity and great craftsmanship by their instructor, His Honour Judge Wethered, O.B.E. His lecture is comprehensive. He tells them how fire starts, how it spreads, how to attack it, how to extinguish it. He shows them various types of incendiary bomb and fire extinguishers. He commends the stirrup pump, tested veteran of the blitz, as the backbone of Civil Defence firefighting methods. And with the aid of his intricately wired model, he rams home the main points of his discourse.

Students learn how to "frisk" with a Geiger counter to detect atomic contamination.

The judge, an enthusiastic believer in the value of a trained Civil Defence force *now*, heads a team of lecturers who have already taught 300 waterworks employees from 119 undertakings in the South West to do a skilled and highly specialised Civil Defence job—keeping our water supplies going if the bombs fall again.

First of its kind in the country, the school owes its existence to the initiative of the Bristol Waterworks Co. Says R. Melvin, general manager: "After heavy bombing it may be necessary to call in men from another area to help to supply water, and it is of great advantage if equipment, materials and training are standard." The company approached the other undertakings in the region—stretching from north of Bristol to Land's End—and agreement was reached on the need for standardised training. Then the idea was put up to the Ministry of Housing and Local Government. Approval and a money grant followed.



Much of the training is practical. Here students are repairing a damaged water pipe.

Planned in Ten Weeks

The training course was planned in ten weeks by R. J. Gardner, the Bristol company's C.D.O., working in conjunction with a regional sub-committee, and it came into operation in January this year under the operational control of K. Brown, O.B.E., of the Bristol Waterworks staff. Headquarters was the Cliff Hotel in the Cheddar Gorge, surely one of the pleasantest situations for a training course that can be imagined. Thirty at a time, the students came from all parts of the region, places usually being allotted on the following basis: Cornwall (2), Devon (8), Somerset (3), Mendip and Gloucester (11 or 12), North Wiltshire (3), South Wiltshire (2). Each course lasted a week, the students arriving on the Sunday evening and departing on the following Friday afternoon. At first, volunteers were asked for, and the response was diffident, if not suspicious; but the news soon spread that attendance at the school was enjoyable as well as instructive, and after three weeks there was a waiting list of would-be trainees.

The syllabus is nicely balanced between basic C.D. training and specialised waterworks repair pro-

His Honour Judge E. H. C. Wethered, O.B.E., giving his lecture on fire-fighting. The model house is used to demonstrate the prevention of fire spread.

cedure (see table below). To leaven the instruction, there is an optional recreational period each evening. Hours are from 9 a.m. to 6 p.m. on the four full days of the course. Trainees are paid their normal weekly rate, the cost of the course being debited to the appropriate undertaking.

Mr. Gardner and his assistant Mrs. E. M. James, have spared no pains to smooth the way for the students, and to ensure that they get the most out of training. Each man receives the following documents before he leaves for the school: Administrative guide and standing orders (what to do on arrival, equipment to bring, mealtimes and working hours, etc.); a map showing the location of the Cliff Hotel and its surroundings; syllabus; time table; list of students; lecture room plan; and a list of officials and instructors.

The first ten-week session was experimental, and now that it has been concluded the results are being examined by the Ministry to decide whether or not the school should continue. Early results indicate that it will, and that students who have taken a course will form a nucleus for mobile repair squads that could quickly provide a bombed district with an emergency water supply.

In addition to Judge Wethered and Mr. Gardner, lecturers included H. Croker (chief instructor, Bristol C.D. Corps), F. Buckley (administrative assistant, Bristol C.D. Corps), F. J. Mathews (Somerset County C.D. Corps), Cmdr. R. J. P. Montgomery (Asst. C.D.O., Somerset), F. C. Revelle, (Deputy Chief Fire Officer, Bristol) and other members of the Bristol Waterworks Company's staff.

Another Firm Starts C.D. Training

RICHARD THOMAS AND BALDWINS LTD., believed to be the only Midland firm since the war to institute its own Civil Defence training scheme, has begun a course for employees at its Cookley works, Brierley Hill, Staffs.

The course comprises seven days' instruction and examinations lasting one-and-a-half days. Of the first fourteen trainees, four are women. If successful, these fourteen will instruct other employees in Civil Defence work. Tutor is F. L. Nash, Staffordshire assistant Civil Defence Officer.

TIME-TABLE

	09.00-10.45 hours	11.15-13.00 hours		14.00-15.45 hours	16.15-18.00 hours		20.00 hours
MONDAY	09.00—Opening address 09.10—The syllabus and the C.D. plan 09.40—Civil Defence films.	Fire-fighting		Fire-fighting (cont'd)	Chemical warfare		Film show (optional)
	1.	2.		3.*	4.*		
TUESDAY	Chemical warfare (cont'd)	11.15—High explosive missiles, etc., and shelters. 12.00—A county Civil Defence division.		Atomic warfare	Atomic warfare (cont'd)		Skittles (optional)
	5.*	6.		7.	8.		
WEDNESDAY	Section 1 at Blagdon. Section 2 at Brockley Hall.	Lecture on pumps, etc. Practical work, pumps, etc. Practical fire-fighting in fire hut and use of hand extinguishers. Testing of respirators.	LUNCH	Section 1 at Brockley Hall. Section 2 at Blagdon	Practical fire-fighting in fire hut and use of hand chemical extinguishers. Testing of respirators. Lecture on pumps, etc. Practical work, pumps, etc.	DINNER	Table tennis tournament (optional)
		9* and 10.*			11* and 12.*		
THURSDAY	Water supply films	Fire services in war, etc.		At Blagdon Pumping Station. Waterworks distribution work with reference to Civil Defence.			Guest night and party (optional)
	13.	14.			15* and 16.*		
FRIDAY	Emergency chlorination and E.D.W.S.	Closing address and discussion.					
	17.*	18.					

* Overalls and rubber boots to be worn during these periods. Students are advised to wear warm clothing on Wednesday

How Electronics Promote Efficiency and Safety—I

Safeguarding the Operator by Photo-Electric Cell

By **ANDREW JARDINE,** F.R.S.A., A.M.I.E.S. (Scot.), M.Inst.W.

The "magic eye" has many applications in industry. In this article, the first of a series, the author explains how the device can be employed as a foolproof guard on "difficult" machine tools. Future articles will deal with its usefulness in cutting down risk of fire and explosion, and in smoke abatement.

MOVING parts of machinery must be adequately and efficiently guarded, says the Factories Act. On some machines this is a comparatively easy requirement to meet; on others there are many obstacles in the way. For example, there are press brakes, guillotines and hydraulic and air-operated presses which require protection round the four sides, yet where the space occupied by mechanical guards may detract from efficient operation of the machine. The fitments on the bed of the machine necessary for the average mechanically operated guard, which moves with the machine on some form of fulcrum, prevent that machine's being used to its full capacity: on a very long press brake it is sometimes necessary to employ extra manpower to cope with the guard alone.

This is where the electronic guard, with its photo-electric light cells, can help. Such a guard is suitable for all machines and presses, whether hydraulic, pneumatic or power driven, so long as the drive is transmitted by means of a clutch. Simplicity is the keynote of this system, and the equipment is so interlocked that in the event of any failure the machine is rendered inoperative. The guard consists of a "barrier" of light composed of many beams which obviates the possibility of blind spots through which the operator could inadvertently penetrate. The setting is such, however, that the thickness of the material is not sufficient to bring the guard into play.

At one side of the machine, and well clear of the operator, the projector is erected. This comprises a pillar which houses several light sources projected through diffusing lenses, the depth of light barrier being governed by the depth of the opening between the tools or daylight of the press or press brake. In a similarly unobtrusive position at the other end of the machine is the receiver; this likewise is housed in an upright containing a number of photo-electric cell units, the apertures of which are so placed in relation to the focal length of the lenses set in front of them that only light from the projector can be received. This avoids variations in sensitivity owing to a fluctuation in daylight or the switching on of artificial lighting.

How Machine is Stopped

From the receiver electrical connections are made to one or more relays which are energised when the light barrier is unbroken, allowing the machine to be operated in the normal manner by foot-pedal or other control. Should any part of the operator's body break the light barrier, the relays are de-energised and the machine, if running, will stop (the exception being those presses which must complete an operation cycle once started) and the controls rendered inoperative.

An adaptation of this equipment was applied to a hydraulic press which required a guard on all four sides. As the base of the press measured approximately 10 ft. × 4 ft., this was quite a problem. It was overcome in a most ingenious manner.

The front of the machine was guarded by a projector unit situated at the side, and projecting a barrier of light of a suitable depth and width across the front opening and on to a mirror of slightly larger dimensions than the barrier and set at 45 deg. to its direction. Thus, the light barrier was deflected along one side of the machine and picked up by a photo-cell receiving unit fixed at the diagonally opposite corner of the press. The other two sides were similarly protected, and in this way two units did the work of four.

An all-round guard of this type has many advantages. Should any obstacle, human or otherwise, interrupt the light barrier at any point, the machine, if working, is stopped, or if not working, rendered inoperative. Thereby the machine becomes foolproof and safe, even for persons working on it but out of sight of the control operator.

More Miners

MANPOWER in the mines continues to rise. On April 26 the number of workers on colliery books reached **714,800**, a rise of **11,000** over the same period last year.

NO LABOUR DIRECTION IN PEACETIME

VISCOUNT SWINTON, speaking in the debate on manpower in the House of Lords last month, stated that the Government had no intention of engaging in direction of labour in peace-time; the Notification of Vacancies Order had shown encouraging results.

The shortage of highly skilled men in engineering was one of the main problems, and industry had been asked to help by training and up-grading workers or using training facilities at Government centres. The new Order was helping in the re-distribution of manpower, and most workers were ready to accept the advice of the employment exchanges upon the relative importance of jobs.

Lord Swinton reported that of 22,000,000 people in civil employment, under 12 per cent were in distribution; nearly 55 per cent were in direct productive industries; 9½ per cent in transport, communication and public utility services associated with productive industry; 17½ per cent in commerce and finance, professional and personal services; and 6 per cent in public administration. Employment in the manufacturing industries had increased 7½ per cent between mid-1948 and the end of 1951, in spite of a reduction of nearly 80,000 in clothing and textiles during 1951.

New Productivity Council

A BRITISH Productivity Council is to be set up to continue the work of the Anglo-American Productivity Council which ends on June 30. The British side will be responsible for publishing the nineteen team reports not yet issued and for following up the recommendations of the forty-seven reports already published.

The new council will probably be in operation before the end of the year, and will be composed of about twenty-four members nominated by employers' organisations and the T.U.C.

More Steel per Man

PRODUCTIVITY in the U.K. Steel-founding industry is estimated to have increased by 15 or 20 per cent since 1949, when the first productivity team visited the U.S.A. In the drop-forging industry, which sent the third team, productivity has increased by about 10 per cent.

These figures have been issued by the Anglo-American Council on Productivity in a survey of the progress made in the two industries. The council comments that it is difficult to separate the improvements which have taken place as a result of the teams' reports from those which would have been made in the ordinary course of events, but much of what has been done corresponds to the practice recommended by the teams, and they have undoubtedly stimulated efforts to raise productivity.

Supervision by Bicycle

TWO more Anglo-American productivity reports have been issued this month:

Biscuits.—Members of the team found that American practice was seldom superior to British. The type of biscuits produced varied so widely between the two countries that a comparison of productivity was impossible. Output could be raised in Britain if raw materials were available. Mechanisation had been widely introduced in the States; there were mechanical ovens over 500 ft. long, where the foremen had telephones or bicycles to keep them in touch with workers at the other end. About welfare arrangements, a member of the team stated: "Standards in the trade in this country are quite as high as in U.S.A.. If the Americans came here they could learn something from our developments."

Furniture.—In the average American factory there seemed to be a real desire on the part of all to achieve maximum productivity. They seldom hesitated to make changes, and this gave strength to their industrial qualities.

The impact of enthusiastic and able control in furniture factories was immediately felt by members of the team. They recommend that British management adopt a more enthusiastic attitude to management as a job, and that its functions and responsibilities should be more clearly defined and decentralised. Workers are recommended to look on any work-saving device as an asset, and to be more ready to try new methods.

Workers at B.I.F.

FIRMS in over 100 towns throughout Britain took parties of workers to the British Industries Fair at Castle Bromwich, Birmingham, on May 10, so that they could see the part which the goods they had made were playing in the country's export drive. Similar parties visited the London sections at Earls Court and Olympia.

More Payment-by-Results

MORE than a third of the workers in 56,200 industrial establishments are being paid wholly or partly by piece-work, output bonus scheme,

PRODUCTION OF PROTECTIVE CLOTHING

Members of the Coventry and District Industrial Safety Officers' Group being shown some of the latest scientific developments in workers' protective clothing during a visit to the Hyde factory of James North and Sons Ltd. Mr. Geoffrey White, governing director, explains some of the machinery in the knitting shop.

or other methods of payment by results, according to a survey undertaken last October by the Ministry of Labour.

An article in the April issue of the *Ministry of Labour Gazette* states that in nearly all types of industry the percentage of workers on payment-by-results' schemes had increased since 1949. The greatest increase was in building and contracting. The proportion of women paid in this way was much higher than the proportion of men in all industries.

Self-help Housing

THE part to be played by self-help groups and housing associations must be decided by the local authority of the area, states a Ministry of Housing and Local Government circular. But the Minister hopes that any self-help group which can make a contribution to the local housing programme will be enabled to do so. The number of licences issued should be related to the resources of the members of that group to complete a given number of houses in a set time.

F.B.I. Offer to Students

EFFORTS are being made to extend the British engineering training scheme to students from nine Latin-American countries. The F.B.I. overseas scholarships scheme was started over three years ago to provide facilities for engineering graduates from all over the world to receive their practical training in British industry. The scheme is financed by engineering firms and a grant from the Board of Trade.

Normally, thirty students a year can be accommodated, but it is possible that more may be admitted on a contributory basis if industry can take them.

Training Steel Workers

IN a report on their training scheme, inaugurated about four years ago, the British Iron and Steel Federation state that a start has been made in providing training for young operatives who become semi-skilled workers, technical apprenticeship schemes have been improved and extended, residential courses have been organised for foremen, and similar courses for managers are starting shortly.

Nine area training committees have been established in the main steel producing centres and training officers have been appointed. The federation undertakes to help and advise firms in the industry in the development of training schemes and arrange joint schemes to help small firms provide facilities comparable to those in larger organisations.

There are still many firms in the industry, both large and small which have no systematic training schemes for their operatives. A survey of the Sheffield area last year showed that out of 132 firms accepting new entrants, more than half the young operatives were not getting systematic training, only about 15 per cent were getting day release for classes, and only 3 per cent were attending evening classes. These firms had 350 unfilled vacancies for young workers. The difficulty was not only to persuade the firms that training was necessary but to persuade operatives to take advantage of the facilities when offered.

Workmen's Compensation

MAJOR R. H. TURTON, Parliamentary Secretary, Ministry of National Insurance, announced in the House of Commons last month that the Government was examining with the T.U.C. the position of those still on workmen's compensation, to see whether any just and equitable solution could be found.

Under the old Compensation Act, a single man received £2 a week, whereas under the industrial injuries scheme he received £2 15s., but the problem of transferring workmen from one scheme to another was not a simple one.

Colour and Lighting

HOW colour and lighting can improve output was the theme of an exhibition sponsored by the British Colour Council, and opened by the Minister of Works in London last month. The exhibits demonstrated the principles affecting the use of colour, and the various types of artificial light and their relation to colour.

WAGES NEWS OF THE MONTH

AGRICULTURAL WORKERS—Application for a wage increase for farm workers has been submitted to the Agricultural Wages Board. A new minimum of £7 a week is being asked for.

CHEMICAL WORKERS—A resolution calling for substantial wage increases in the chemical industry was passed at the quarterly meeting of the national executive council of the Chemical Workers' Union.

CO-OPERATIVE WORKERS—Wage increases varying from 2s. 6d. to 7s. a week have been awarded to 280,000 workers in retail Co-operative stores. Men aged 21 and over received 7s. and women 5s.; men between 18 and 20, 5s. and women 3s. 6d.; youths under 18, 3s. 6d. and girls 2s. 6d.

ENGINEERS—Delegates to the conference of the Amalgamated Engineering Union instructed their executive to press through the Confederation of Shipbuilding and Engineering Unions a claim for a wage increase of £2 a week for all adult male workers. The resolution also demanded that merit rates, class and district differentials be maintained.

ENGINEERING APPRENTICES—Wage increases ranging from 5s. 6d. a week at 15, to 11s. at 20, have been agreed between the Engineering and Allied Employers' National Federation and the Confederation of Engineering and Shipbuilding Unions. The annual conference of the Amalgamated Engineering Union has agreed to submit a further claim for an all-round increase of £1 a week for apprentices and youths.

LOCAL GOVERNMENT OFFICERS—Claim for increased pay for 150,000 employees in local government service has been rejected by the employing authorities.

MINERS—Resolutions asking for an increase of 30s. a week for all mineworkers are on the agenda for the annual conference of the Scottish area of the N.U.M. this month.

POTTERY WORKERS—Workers in the pottery industry have accepted the employers' offer of a cost-of-living bonus amounting to an increase of 11s. 6d. on a 44-hr. week for men, 5s. 9d. for women, and 3s. 10d. for workers under 21.

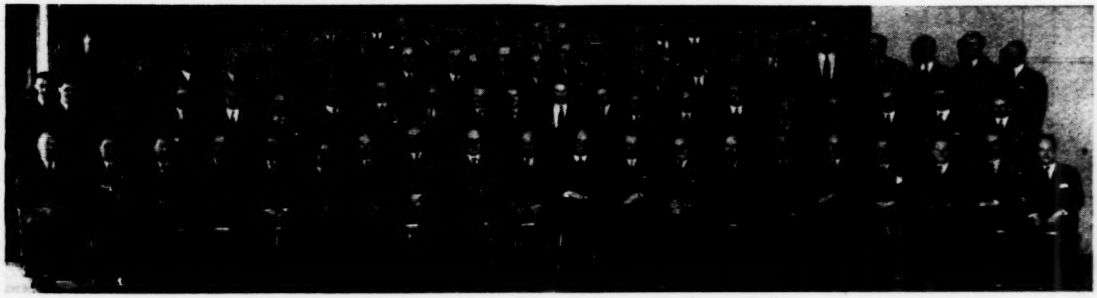
RAILWAYMEN—A joint claim for an all-round wage increase of 10 per cent is to be submitted by the three railway unions.

SHOP WORKERS—Delegates to the annual conference of the Union of Shop, Distributive and Allied Workers instructed their executive council to open negotiations as soon as practicable for substantial wage increases for all members, and to ensure, by constantly submitting demands to employers, that increases in the cost of living should not absorb the higher wages won.

TEACHERS—About 200,000 men and women teachers in primary and secondary schools may receive wage increases under an agreement of the Burnham Committee. Proposed increase for men is £40 a year and women £32. Proposals are subject to confirmation by local authorities.

TOBACCO WORKERS—Wage increase of 5s. a week to men and 4s. to women, with appropriate increases for juniors, has been awarded by an industrial court. Cost to the industry is estimated at £4,000,000 a year.

TRANSPORT WORKERS—Representatives of 200,000 bus and tramway men of the passenger group of the Transport and General Workers' Union have asked for a substantial wage increase to meet the rising cost of living.



A group of directors and management staff of the English Sewing Cotton Co. and its associated undertakings. The occasion was a week-end conference held at Harrogate. The company subscribes fully to the principles of joint consultation at every level, and periodically brings its management staff together for formal and informal discussion of domestic and general policies. This method has proved most successful.

THE MINISTER SAID . . .

Answers to Questions in the House

Supervisors (T.W.I.)

During 1951, the number of firms which have adopted Training Within Industry for Supervisors increased from 2,724 to 3,008, while a considerable amount of follow-up work was done. In the course of the year, 15,651 supervisors were trained in job instruction, 19,608 in job relations, and 6,673 in job methods. Since the scheme started in 1944, 193,095 supervisors have been trained in job instruction, 125,572 in job relations and 37,299 in job methods. (*Minister of Labour,* April 8, 1952.)

Industrial Disputes

The number of days lost through industrial disputes between 1946 and 1951 was as follows: 1946, 2,158,000; 1947, 2,433,000; 1948, 1,944,000; 1949, 1,807,000; 1950, 1,389,000; 1951, 1,694,000. (*Minister of Labour,* April 10, 1952.)

Ex-T.B. Patients

Regarding the difficulties of ex-tuberculosis patients in securing employment, especially in firms with superannuation schemes, the Ministry's officers were at all times encouraging employers to engage disabled persons. (*Minister of Labour,* May 1, 1952.)

Cancer

There is reason to believe that manufacture of A-naphthylamine and B-nap. is associated with the occurrence of cancer of the bladder among workers concerned. This disease also occurs among both sexes of the general population who have no contact with these substances. Although special research has been in progress for several years, the extent of the risk attributable to the industrial use and manufacture of the substances is not fully established. The precautions recommended depend upon the method of manufacture and the circumstances of the use of the substances. (*Minister of Labour,* May 6, 1952.)

Industrial Noises

There was no statutory power under the Factories Act to deal with industrial noise or other nuisances affecting residents in the vicinity of a factory. Such matters fell within the provisions of the Public Health Acts. (*Minister of Labour,* May 6, 1952.)

Anglo-American Link

To mark a further step towards the common purpose of increasing good foremanship on both sides of the Atlantic, R. S. Damon, President of the Trans-World Airlines, presented a plaque to Sir Percy H. Mills, K.B.E., President, Institute of Industrial Supervisors. The plaque, which sets out the code of ethics of the National Association of Foremen of America, was handed over at a ceremony at Management House, London.

"Italians Not Wanted"

INTRODUCTION of Italian labour into the clay industry, on which agreement has been reached at national level between employers and union officials, is being opposed by clay workers in the Tamworth area. There are thirteen firms in the area engaged in the industry.

THE first week-end course on lecturing techniques in supervision for the building industry was held at Rugby from April 18-20.

Personal Column

Sir W. David Ross, K.B.E., M.A., LL.D., has retired from a number of public appointments: chairmanship of the Civil Service Arbitration Tribunal and of the four wages councils (ready-made and wholesale bespoke tailoring; shirt-making; dressmaking and women's light clothing; and tobacco); and from the panel of the appointed members of the Industrial Disputes Tribunal.

Mrs. L. S. Balcon has been appointed sister-in-charge at the Godley (Cheshire) factory of T. Wall and Sons Ltd. Mrs. Balcon trained at Selly Oak Hospital, Birmingham, and at Birmingham Accident Hospital and University. She is a member of the Royal Institute of Public Health and Hygiene and holds the Industrial Nursing Certificate. Her previous appointments have included that of night sister and deputy matron with the Austin Motor Co. Ltd.

Adam Letham, the man primarily responsible for the establishment of Ramsay Lodge (the residential staff training centre for employees of the Commercial Bank of Scotland) has been appointed temporary head of the education department of the British Institute of Management during the absence of Mr. Norman Rimmer.

M. W. Young, youth welfare officer of Steel, Peech and Tozer, has been made mayor of Rotherham. He started work with the firm in 1922, and was made foreman of Templeborough Machine Shop. In July, 1942, he was appointed youth welfare officer and in the course of his duties has engaged over 2,000 boys for the company.

Obituary

R. Hewitt, J.P., industrial relations officer of Clayton Aniline Co. Ltd., died on April 19. Mr. Hewitt was a life member of the Association of Chemical and Allied Employers, represented the chemical industry on several I.L.O. committees, sat on arbitration tribunals, and was a member of the J.I.C. for the chemical industry.

Making the Most of the Meat Ration

By **WINEFRED YEOMANS**

Catering Director, Daily Mirror Newspapers Ltd.

This is the first of a series of articles designed to help canteen managements to get the best out of the food they buy. The author, as well as being a journalist specialising on food subjects, has had many years' practical experience of industrial catering.

IN the words of a popular song "How lovely cooks the meat," I will broach the most debatable subject on the canteen agenda: *Meat. Red Meat.* Now it is quite safe to say that no matter how attractive is the canteen and efficient its service generally, if the meat ration is badly handled and inefficiently distributed the canteen cannot be a success.

Lucky is the catering manager who has cooks who understand how to cook it to full advantage as to tenderness, flavour and yield, how to control portions and manage the debris and how to lay on variety in the menu so that customers don't worry about meat. It can be done. Attention to the following points take care of that:

1. There must be a qualified and experienced caterer who is master of the rationing system; has all information and details available at any time; knows how to control and where necessary, instruct the cooks; thoroughly understands meat in all its stages and can put over his menus.
2. The butcher serving any sizeable establishment must be one who has no private customers: he must specialise in establishments. The caterer should consult with the meat supplier regularly the week before delivery, giving a good idea of how the forthcoming weekly allocation should be divided. A second choice should always be given, particularly when the ration is on a reduced scale. This facilitates satisfactory service and the advance making of menus. The caterer should tell the butcher what he is in the market for, such as pig's feet, calves' heads, tripe, and so on. Negligent or erratic ordering and scrappy consultations are unfavourable to both sides.

Check on Delivery

3. Meat should be checked on delivery and any points of criticism or guidance for future deliveries promptly given. When the delivery note has been signed by the acceptor it goes to the store-keeper for entry in his day receipt book and then it should be entered in the "bible." Whether this is done by the store-keeper, the control clerk or the manager is a matter for individual establishments. (Reference to this "bible" will be made later.)
4. If the meat is to be hung it should go at once into the cold room or larder, dependent upon when it is to be cooked. When meat arrives in an iced condition it must be defrosted gradually. Drips should be collected and utilised in the stock pot for gravy-making; cleanliness is therefore essential.
5. Care should be taken when butchering and boning to grade the trimmings carefully so that nothing is wasted, and fat is collected, graded and utilised. Bones should be broken.
6. Joints of mixed sizes should not be put to roast all on one tray since this lack of method results in waste of heat and labour in looking after the smaller joints.
7. Joints for roasting should be wiped, thinly coated with seasoned flour and laid in a hot roasting tin containing hot fat.
8. The slow roasting process at a temperature not exceeding 350° F. or Regulo Mark 4 is to be recommended because it tenderises the meat, preserves flavour, saves fuel and reduces shrinkage loss by as much as 5 lb. to every 25 lb. of

meat; a great consideration nowadays!

9. Don't put a roast on the menu unless there is enough to go right through. It is fatal to confidence and prestige to put it on and take it off every half hour or so; or to put it on only at peak times or when favourites may benefit. When the joint is on make sure that alternative dishes are also on the menu—dishes which ensure keen competition. The psychology and economics of this are sound: people will voluntarily choose *not* to take the joint because there is something else on the menu which they prefer. There is an art in getting your customers to help you make the meat go round. Make sure that alternative dishes are adequate in protein content. Attractive salads should be available.
10. Conscientious attention to portion control, carving and serving are of paramount importance in the fair distribution of the meat ration and the offal allowance. Establish just how many portions are to be carved and plated from 1 lb. of cooked meat. Never allow plated-up meats to remain in the hot cupboard to get dried up and discoloured. Make it a rule that debris from the carving table and the slicing machine be collected and placed in its own container in the larder refrigerator, labelled if need be and used *by weight* in made-up dishes.

The foregoing are rudimentary suggestions but if followed they should be of great help.

The Homely Stew and Hot Pot

Well-made dishes in this class are always popular, but here again, portion control is essential to success. Meat should be cut into uniform pieces, whether "fingers," large dice or actual portions. All the other ingredients which go into the casserole, hot-pot or stew are to supply bulk, mineral salts and flavoursome trimmings. They include onions, roots, pulses and cereals and are essential ingredients just as the Yorkshire or plain steamed pudding, forcemeats, pease pudding, the appropriate sauce and roast potatoes belong to the joint.

As much care should be taken over the homely yet delicious Irish stew as over more expensive dishes. A plateful of grey watery gravy in which float a few scraps of barley and shreds of onion, a wad of sheer gristle and a scrap of greyish meat cling to a few bones is *not* a pretty sight, nor is it an Irish stew. Authentic Irish stew contains potato, onion, carrot, mealy pearl barley and succulent pieces of meat.

A casserole can contain so much of flavour and goodness that plates are mopped up with gusto: beans, peas, carrot, swede, onion, tomato, parsley and, in season, vegetable marrow and pumpkin. *And here's a secret:* these roots and pulses absorb and emulsify fat. The function of fat is to supply warmth and energy. Fat working in collaboration with the starches (carbohydrates), slows down their burning within the system, thereby making the heat and energy which they create last longer. The science of feeding applied in everyday practice takes care of such a matter. Many people cannot eat lumps of fat but very few fail to enjoy and assimilate plenty of fat when it is naturally emulsified by the action of fruit acids and the starches provided by fruits, roots, pulses and vegetables, aided, of course, by the vitamins. Good cooking takes all this in its stride.

This Business of Blanching

In large-scale catering it is often necessary to blanch the meat off a day or two before it is cooked. Now, although onions cannot be incorporated in this first sterilisation process, the meat should not be entirely without seasoning, for however much it and its sauce can be flavoured afterwards, you cannot atone for its absence of seasoning at the start. A few cloves, peppercorns, a crushed clove of garlic, and a couple of bayleaves can safely be employed in the blanching.

The Caterer's Bible

This is a book in which records are kept of the intake of all rationed goods. At the top of the page the entitlement is written with space allowed for pencil entries of Food Office amendments. The page is divided into five columns in this way: 1. Date; 2. Supplier's name; 3. Quantity received; 4. Total drawn to date; 5. Amount yet to be drawn of entitlement.

By this means the caterer knows the exact position at any time and can check on usage as well as on suppliers. In making meat entries care must be taken to record only rationed meats.

PERSONNEL POLICY

Continued from p. 510

where many of the older houses have no bathrooms. They are frequently used by employees during the evenings, up to as late as 9.30 p.m.

Two canteens, provided with thoroughly up-to-date equipment, and run by the company under the charge of the canteen manageress provide over 500 main meals daily, in addition to the usual morning and afternoon tea-breaks. This supply of midday main meals represents over 60 per cent of all employees. A canteen committee advises management.

Social Activities

The social side is looked after by the social committee, freely elected by all employees. Sports sections comprise football, cricket, netball and hockey. Other recreations, such as snooker and table tennis, are to be provided in the recreational centre now under construction.

In September, 1950, the sickness plan was introduced, and this has proved of great benefit to many employees. It covers all full-time employees, whether office or factory, with six months' service or over. Available benefit is two weeks for each year of service, up to a maximum of twenty-six weeks; periods of benefit are deducted from this credit. Benefit is payable at the individual's normal salary, or for hourly-paid employees at the job rate for 45 hours per week, in both cases less the amount of National Health Insurance receivable.

At this stage it is impossible to judge with any accuracy the results of the introduction of this personnel policy in terms of increased production. New machinery and improved production methods have been introduced during this period, and other factors have also played a part, but the setting up of the personnel department has helped to highlight the importance of good employee relations, and has assisted in improving the quality of supervision. It is true to say that employees generally have appreciated this clear statement of company policy. They are becoming more ready to take part in consultation, and generally to show an active co-operation in working for the success of the firm.

675 lbs from 3'6" =

Read this Factory Manager's letter about the shoe in the picture :

'The owner, C. Kinnersley, was wearing them in our No. 1 Mill at 12.30 a.m. on 21.2.52 while loading up plates One plate, 18 feet long by 2 feet 6 inches wide by ⅜" thick, approximate weight about 675 lbs., slipped and fell from a height of about 3' 6". One edge of the plate struck over the toe and inner side of his right shoe. The man suffered no injury'

About 675 lbs. of metal from a height of 3' 6"— and the man not hurt!

As the photograph shows, the toecap of the shoe that took the blow isn't even bent . . .

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'To every worker who, while wearing Sound Brand Internal Steel Toe Safety Boots, sustains a toe injury, we will pay £5 a week during the period of absence from work up to a maximum of 10 weeks as a result of that injury'

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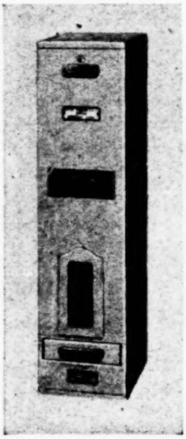

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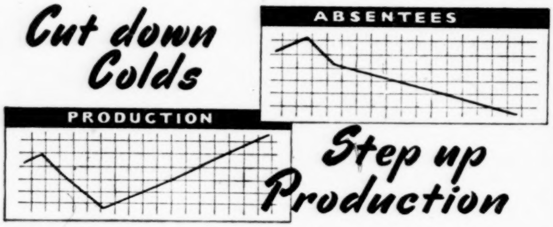

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New Industrial Equipment

EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

Readers who wish to have more particulars of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph.

We are always glad to consider for publication descriptions—preferably accompanied by an illustration suitable for reproduction—of new products

HANDLING

Plug-in Hoist

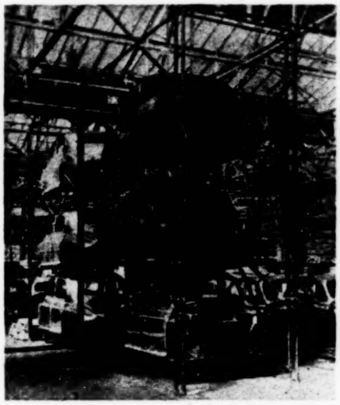
LIGHTWEIGHT and compact, this electric chain hoist can be hung up, plugged into the nearest socket outlet, and put to work. It enables handling to be speeded up almost anywhere in the factory, for it can be used in positions where the need for power lifting has long been felt, but where cost or some other reason has prevented the installation of equipment. One ton, ½ ton and ¼ ton sizes are supplied. Standard hoists are available for 200-500 volts A.C. only.

The tempered steel gears run in a sealed oil box, and all gears are splined to their shafts. The totally enclosed motor has an aluminium alloy casing. There is a self-sustaining, silent type load brake capable of holding the full load, and a nipper type brake will sustain the full load independently. The "up" side of the control handle is grooved, so that visual control is unnecessary. Various models are available, within the lifting range detailed above. Model AW 4, for instance, a ½ ton size, will lift its full load at 34 ft. per min., and in the 1 ton size at 17 ft. per minute. **(PM/499.)**

Tubular Storage

THIS system of tubular construction makes possible the full use of tube, with its constant strength in every direction, for all types of permanent, semi-permanent or transportable structures. The manufacturers have set out to provide a tube joint which can be quickly assembled by untrained workers, and which is free from sharp edges, or bolts and nuts, that might tear or chafe the skin. Tubes are fitted into joints by means of a grub screw applied with a key provided.

Many different types of structure can be tailored on demand to exact requirements. The clamps are designed to use tubes cut to length, as distinct from many types of scaffolding fitting which use overlapping tube joints and are for temporary use only. Clamps are made for international standard steam, water or gas tube, with thick welded steel walls. Among the types of structure for which this system has been used are car body storage racks (see picture), machinery guard rails, crush barriers, pallets and cycle sheds. **(PM/500.)**



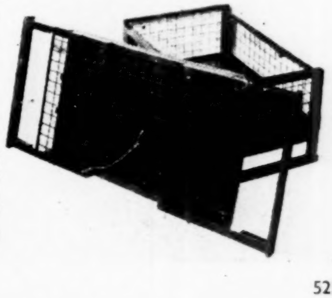
Bin Carrier

WITH its adjustable lifting hook to engage the handle of the bin, the Bin Master provides a quiet and quick means of moving various types of waste or salvage bins with ease and safety. Its axles are cranked so that the load is centrally slung between the wheels; the bin is carried nearly upright. Various models are available, the one illustrated being a heavy duty type fitted with 8 in. dia. wheels with rubber cushion tyres and ring-shaped handle. Capacity is 2 cwt.

Another pattern is particularly suitable for canteens. It will handle churns as well as bins, with handles up to 26 in. from the ground. **(PM/501.)**

Collapsible Stillage

THE manufacturers of these weld mesh stillage racks have been experimenting for some time with a view to minimising the amount of floor space



necessary for stacking and ensuring absolute safety in use. Their latest product is collapsible, for storage when not required, and capable of carrying 1 ton mobile or 5 tons static.

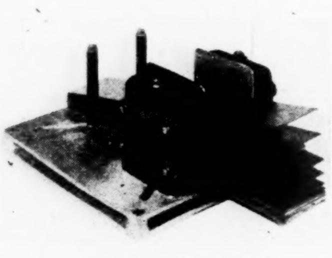
Containing no loose parts, these racks are fitted with loaded catches for safety. They can be supplied with all-steel sides. **(PM/502.)**

Platform Lift

THE illustration shows a pneumatic platform lift of a type supplied to the aircraft and other industries. At an air pressure of 60 lb. per sq. in. this lift has a capacity of over 1,000 lb. The platform is 40 in. in diameter and the cylinder has a stroke of 36 in. The device is designed to be installed at or below floor level. **(PM/503.)**

Separates Sheets

THE Magna Float separator is intended to float or hold in suspension ferrous sheets, discs and the like so that each piece can be readily withdrawn by an operator for feeding into a press or similar machine. The difficulty of separating piles of blanks or strip material is well known, and by the use of the Magna Float is eliminated, and thus the handling of material is substantially speeded up. Glove damage and risk of injury to workers in the form of cuts from sharp edges are also reduced, because each piece is ready for withdrawal singly. Frequently when using oily or even clean sheets, it is necessary to provide labour to separate them before they are passed to an operator. The Magna Float, correctly applied, will dispense with the operator's assistant.



The device consists of magnets which create repelling fields in the material, thus causing separation and flotation. The magnets are mounted in containers on an aluminium base. Adjustment is provided to accept strip up to 7 in. wide and blanks 12 in. in diameter.

The standard separators are provided with one pair of magnetic units and stops, and are designed to take stacks of material up to 4½ in. deep. It is essential that the banks of magnets should be higher than the stacks of material. Area of separator base is 14 in. × 16 in. **(PM/504.)**

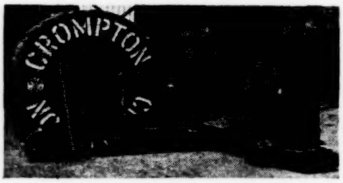
Shunts and Tows

BUILT to an extra-heavy duty specification for the dual purpose of shunting railway wagons and towing works trailers, the Shuntug model 40 has a drawbar pull of 3,500 lb. and a maximum speed of 16 m.p.h. It is particularly useful in yards and sidings where the rails are filled in. It is not restricted to rails, but can go quickly from place to place, breaking up lines of wagons and putting individual wagons exactly where they are needed.

Further details of model 40 are: 4-cylinder industrial petrol engine, 40 b.h.p. at 2,500 r.p.m., water-cooled; 12-volt battery and self-starter, coil ignition; four forward speeds and one reverse; 4 in. × 2 in. channel steel chassis, front and rear bumpers of ¼ in. steel; adjustable bucket type driver's seat; four wheel brakes; turning radius 102 in. A larger model, 20 AP, has a 46 b.h.p. diesel engine, a drawbar pull of 4,000 lb., and a turning radius of 126 in. **(PM/505.)**

Drum Carrier

AT one time, five men were needed to push around a cable drum, which weighs 4 tons. Now the job is done—much faster—by one lad driving an Electricar industrial truck towing a drum carrier. The Electricar is a type TLR6 1-ton load capacity, elevating platform industrial truck, the carrier is designed to accommodate different sizes of drum. Between them, these two products provide yet another means of taking the backache out of materials' handling. **(PM/506.)**

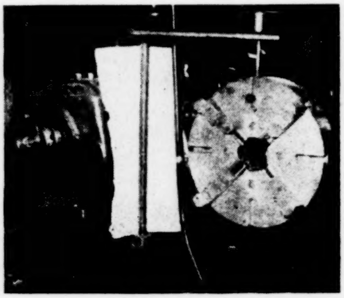


WORKSHOP AIDS

No-Nip Chuck Remover

THE device illustrated is a simple but effective means of removing heavy lathe chucks from the mandrel, or of mounting them in the mandrel, without the irritating nipping of fingers often experienced by turners. The swinging bar (see picture), 1¼ in. diam., is bent up to suit the particular machine for which it is intended. Welded to the upright of the bar, near the base, is a steel spacer which acts as a stop and a bearing face on the steel bracket in which it swivels. A slot is milled in the horizontal portion of the swinging bar to take the chuck-holding bar. The last-named needs ample clearance in the slot for ease of movement when it is being swung into position.

To remove the chuck, the bar is swung over, the holding bar located in one of the chuck bolt slots, the Allen screw tightened against the bar at the bottom of the slot, and the chuck swung away from the mandrel to the rear of the machine. For mounting, these operations are reversed. The device will work equally well with either the bolt type or the thread boss type chuck. **(PM/507.)**



CLEANING

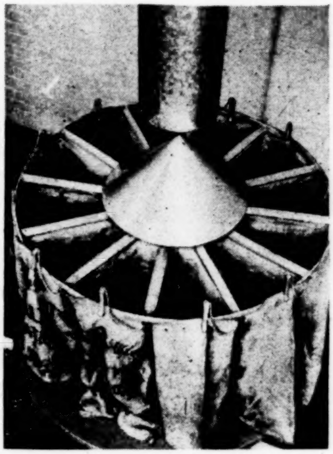
Magnetic Sweeper

HERE is a "broom" designed to keep factory floors free from nails, screws, strips of steel, chilled iron shot and, indeed, any ferrous metal that may be lying about. The magnetised drum is propelled carpet sweeper fashion, the scrap swept up being cleaned off periodically into the salvage bin. The manufacturers claim that constant contact with iron and steel particles will not weaken the magnetic action. **(PM/508.)**

Cleans Floors

A SOLUTION is available which cleans oil-bound or greasy floors by emulsifying the grease without affecting the floor surface. It has no smell, is not slippery when either wet or dry, and may be easily applied with hot water by unskilled labour. Having germicidal qualities, it has been awarded the certificate of the Royal Institute of Public Health and Hygiene.

Method of application: Mix with hot water, in the proportion of 4-6 oz. to one gallon. Swill over floor and lightly scrub and mop up. Rinse floor with clean water and leave it to dry. Photograph shows a section of floor cleaned (*right of picture*) in this way. **(PM/509.)**



DUST DISPOSAL

Twelve-bag Collector

WOOD waste, fine sawdust or other granular materials which are discharged from an outlet and collected in a sack or similar container, present a handling problem. The materials build up quickly at the outlet and choking easily occurs, so that someone must be in constant attendance to prevent it.

To overcome this problem the multi-bagging attachment shown above has been produced. It needs little attention, and comprises a steel cone mounted centrally on an iron framework, which is divided into twelve sections and supported on a circular metal fabricated base with castors. Bags or sacks are attached in position, no hooks or straps being employed.

The equipment is placed directly underneath the outlet so that when the material is discharged it is evenly distributed into each of the twelve sacks. To empty the sacks, the equipment is moved to one side slightly before the sacks are full. This enables half the sacks to be removed and replaced without interrrupting the flow of material. **(PM/510.)**

ELECTRICAL

Self-winding Cables

SPRING-LOADED reels for electric cables that operate on the same principle as the domestic blind, are available in nine sizes to accommodate different lengths and gauges of cable. They can be used to hold the power leads for a variety of tools and appliances in a neat, convenient manner.

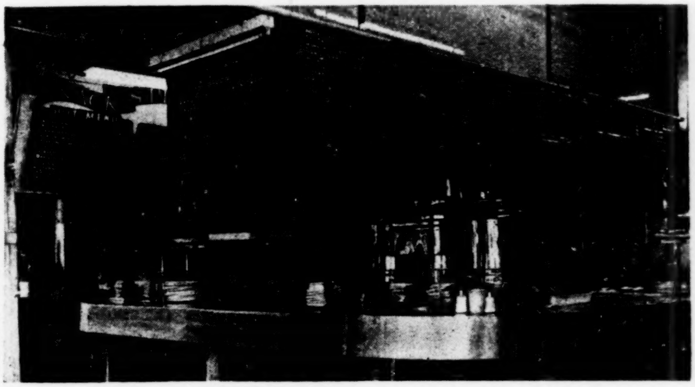
Smallest reel in the range is for ordinary twin lighting flex, while the largest will take 3 in. diam. cable for use on mobile cranes and loaders. In between come models designed to carry 60 ft. to 100 ft. of lead for various machine and portable power tools.

A special type has been developed for use in an explosive, inflammable or moisture-laden atmosphere; this has a two-way contactless reel that eliminates the possibility of sparking. **(PM/511.)**

CANTEEN

Magnetic Displays

THE Wondersign set is so designed that the user can set up display boards of any variety in a matter of a few minutes. It thus has many uses —as a canteen menu board, a factory production list, many forms of publicity, and so on. The standard cabinet contains nine display boards, two stencilled fount boards bearing eighty-four



1 in. characters and 150 ¾ in. characters, and two price tickets. The display boards have hinged struts which enable them to stand either upright or on their sides.

Alternatively, the magnetised characters can be attached to any ferrous metal background, as has been done over the snack bar in the illustration. The magnets are sufficiently strong to be attached to models, and can be used over maps, photographs, etc.

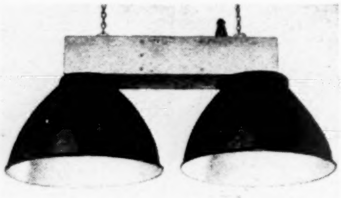
(PM/512.)

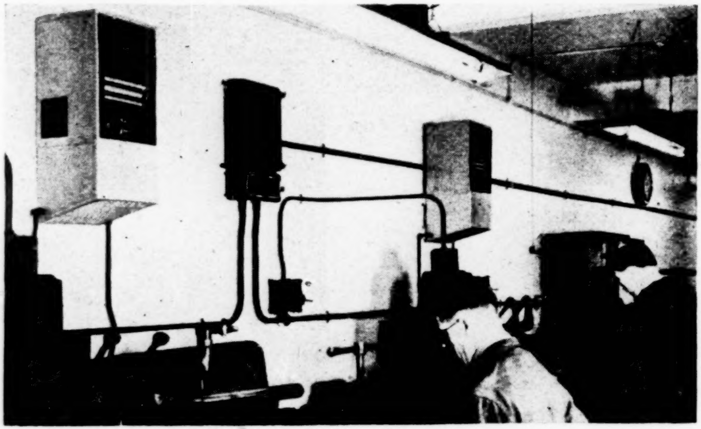
LIGHTING & HEATING

High Light

FOR use in aircraft hangars, factory bays containing an overhead crane or in other premises where a reasonable colour rendering combined with high mounting is required, this blended light unit incorporates a mercury vapour and a tungsten lamp. It is made in two sizes: (a) 1,000 watt tungsten and 400 watt high-pressure mercury vapour; and (b) 500 watt tungsten and 250 watt H.P./M.V.

(PM/513.)





Gas Space Heater

THE Halcyon assisted-convection space heater (models L and LX) is made for wall or stanchion mounting at a height of 6 ft. to the base.

An electric fan (60 watts consumption) draws in air from below the heater, blows it up a vertical passage between the combustion chamber and the draught diverter, and out between the tubes through which the hot gases are passing. The air is thus heated and discharged into the room without any direct mixing with the flue gases. Vanes direct the warmed air downwards.

(PM/514.)

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Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

STATUTORY INSTRUMENTS

No. 661. The Road Haulage Wages Council Wages Regulation Order, 1952. Dated March 26, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(d). *H.M.S.O.* 1s. (Revokes Orders R.H.(30), R.H.(32) and R.H.(38), and fixes new statutory remuneration payable and holidays allowed. Operative from April 18, 1952.)

No. 699. The Pin, Hook and Eye, and Snap Fastener Wages Council (Great Britain) Wages Regulation (Holidays) Order, 1952. Dated March 31, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O. 4d.* (Revokes Order O(36), and fixes annual holidays, and holiday remuneration payable. Operative from April 21, 1952.)

No. 744. The Button Manufacturing Wages Council (Great Britain) Wages Regulation (Holidays) Order, 1952. Dated April 8, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O. 4d.* (Revokes Order V.(41), and fixes annual holidays and holiday remuneration payable. Operative from April 28, 1952.)

No. 822. The Boot and Floor Polish Wages Council (Great Britain) Wages Regulation Order, 1952. Dated April 22, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(c). *H.M.S.O. 4d.* (Revokes Orders B.P.(31) and B.N. (33), and fixes statutory minimum remuneration payable. Operative from May 7, 1952.)

No. 834. The Made-up Textiles Wages Council (Great Britain) Wages Regulation (Holidays) Order, 1952. Dated April 24, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(d). *H.M.S.O. 6d.* (Revokes Orders M.T.(20) and M.T.(28), and fixes annual holidays and holiday remuneration payable. Operative from May 12, 1952.)

No. 849. The Cutlery Wages Council (Great Britain) Wages Regulation Order, 1952.. Dated April 28, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O. 6d.* (Amends Order C.T.(49) and fixes new statutory minimum remuneration payable. Operative from May 12, 1952.)

GENERAL

The Safeguarding of Milling Machines. Second report of the committee originally appointed in 1945. Deals with the guarding of special purpose machines. (Should be taken in conjunction with the Committee's Interim Report published in 1947.) Issued by the Ministry of Labour and National Service, Factory Department. *H.M.S.O. 3s. 6d.*

Treatment of Damp Walls. Building Research Digest. No. 41. Issued by the Building Research April, 1952. *H.M.S.O. 3d.*

INDUSTRIAL COURT AWARDS

No. 2364. Railway Shopmen. Reference: For substantial wage increase for railway shopmen. Award: Increases ranging from 8s. to 9s. 6d. a week for adult males; from 3s. to 7s. for apprentices; from 6s. 6d. to 7s. for adult females; from 3s. to 6s. for junior females. (13/3/52.)

No. 2365. Government Industrial Establishments. Reference: Application for payment of plus rate of 1d. an hour to labourers operating floor polishing machines. Award: Claim not established. (25/3/52.)

No. 2366. Civil Air Transport. Reference: That payment of London Allowance to certain pilots in B.E.A. based in the London area be discontinued, and basis of compensation determined. Award: Claim not established. (27/3/52.)

No. 2367. Printing Trade. Reference: For increase of 30s. a week in basic minimum wage of readers employed on London newspapers. Award. Claim not established. (2/4/52.)

No. 2368. Printing Trade. Reference: For increase of 25s. in basic rate of lithographic artists, designers, engravers and process workers employed on London newspapers. Award: Claim not established. (2/4/52.)

No. 2369. Printing Trade, Reference: For increase in basic rate of journalists employed on London newspapers from £14 14s. to £16 16s. a week. Award: Claim not established. (2/4/52.)

No. 2370. Fair Wages Resolution. Reference: Complaint that the terms of the Fair Wages Resolution were not being applied by a Plymouth firm in respect of work done for the Ministry of Supply. Award: Claim not established. (7/4/52.)

No. 2371. Iron and Steel Trades. Reference: That wages of fully-skilled roll turners be increased by the addition of the melters' basic sliding scale to the weekly minimum tonnage bonus payment of 10s. and to the 7s. referable to the standard tonnage. Award: Claim not established. (7/4/52.)

No. 2372. Catering Industry. Reference: For 10 per cent increase in rates of pay of restaurant car travelling staff and restaurant car depot staffs. Award: Increase of 8 per cent on all rates. (9/4/52.)

No. 2373. Saw Mill Industry. Claim: For increase of 6d. an hour to adult wood-cutting machinists; for one additional week's holiday with pay. Award: Increase of 3d. per hour to wood-cutting machinists; annual holiday entitlement for sawyers and machinists to be increased to two weeks (88 hours) per annum, based on one day's holiday for each month of service. (16/4/52.)

No. 2374. Civil Air Transport. Reference: Claim for salary increase for clerical workers of £1 a week to adults and 15s. to those under 21, and for elimination of lowest scale of existing salary structure. Award: Increase of 9s. a week to adults and 5s. to workers under 21; the Court found against the claim for the elimination of the lowest salary scale. (24/4/52.)

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 135. Remuneration of Certain Workers Employed by Remploy Ltd. Claim: Increased salary scales for foremen, chargehands and storekeepers: Award: Minimum rates were awarded as follows: Foremen—from £9 10s. for factories with 60 employees to £11 10s. for factories with over 100; Provincial rates 10s. a week less; Chargehands—Grade I, £9. Grade II £8 10s. Provincial rates 7s. 6d. less. Storekeepers—Grade I, £7 15s. Grade II, £6 15s. Provincial rates 5s. less. (25/3/52.)

No. 136. Applicability of the National Arbitration Tribunal's Award No. 1654 to two Workers Employed by an Iron and Steel Firm at Ebbw Vale, Monmouthshire. Claim: That terms of Award No. 1654 be applied to two named workers. Award: In favour of workmen. (1/4/52.)

No. 137. Claim for the Payment of a Specified Allowance to Certain Workers Employed by the Port of Bristol Authority. Claim: For payment to carpenters engaged on an exhibition stand of an allowance of 2s. 6d. a day in accordance with specified agreement. Award: In favour of workmen. (2/4/52.)

No. 138. Rates of Wages of Electricians Employed in the Flour Milling Industry. Claim: For substantial wage increase. Award: Rates of wages to be 157s. 6d. in Class A mills, 149s. in Class B, and 145s. in Class C. (4/4/52.)

No. 139. Rates of Wages of Electricians Employed in the Seed Crushing Provender and Compound Food Manufacturing Industries. Claim: For substantial wage increase. Award: Rates of wages to be 156s. 6d. in Class A mills, 148s. in Class B mills, 145s. 6d. in Class C mills. (4/4/52.)

No. 140. Rates of Wages and Annual Holidays of Certain Workers Employed by an Engineering Firm in London. Claim: For specified wage increases and two weeks' paid annual holiday. Award: Increase of 11s. per week of 44 hours to adult males and 10s. 1d. to adult females of 18 and over. In relation to paid holidays, the Tribunal awarded that the employers should observe the exact terms and conditions of the engineering agreements of April, 1946, and November, 1951. (5/4/52.)

No. 141. Rates of Wages and Annual Holiday of Certain Workers Employed by a Knitwear Manufacturing Firm in London. Claim: For pay increase and additional week's paid annual holiday. Award: An increase of 3½ per cent on gross wages from September, 1951, with a further 3½ per cent on gross wages paid prior to September, 1951, from February, 1952; the increase of 2s. 6d. per week given to linkers and repairers by the company since September, 1951, shall be merged in this Award. (8/4/52.)

No. 142. Annual Holidays in the Home Grown Timber Trade. Claim: For two weeks' paid annual holiday. Award: In favour of workmen. (9/4/52.)

No. 143. Remuneration of Workers Employed in the Lighterage Industry in the Port of London (Award No. 99). Claim: (a) Whether there should be a flat rate bonus instead of piecework payment in the Legal Quay section, and, if so, how much; (b) whether in addition there should be a flat rate bonus increase applicable to all sections, and if so, how much; (c) whether there should be a contingency allowance for any grades according to skill, and if so, how much. Award: (a) Flat rate bonus of 10s. a week to be paid to workers in the Legal Quay section; (b) Flat rate bonus paid to workers in the Rough Goods section and to tugmen to be increased to 17s. a week. (9/4/52.)

No. 144. Rates of Wages for a Particular Period in Respect of Certain Workers Employed by the Wakefield Corporation. Claim: Dispute concerning rate paid to workers between October, 1946, and June, 1947. Award: Claim not established. (9/4/52.)

No. 145. Lieu Bonus of Certain Workers Employed in the Jute Carpet Industry. Claim: For increase in lieu bonus of 6s. a week to men and 4s. to women. Award: in favour of workmen. (15/4/52.)

No. 146. Holidays with Pay in the Hosiery Dyeing, Bleaching and Finishing Industry in the Midlands. Claim: Dispute concerning proposed agreement on holidays with pay. Award: (1) Maximum amounts payable at each holiday period—Males 20 and over: Christmas £2 10s.; Easter £2 10s.; Whitsun £2 10s.; Summer (2 weeks) £12. Females 18 and over—Christmas £1 15s.; Easter £1 15s.; Whitsun £1 15s.; Summer (2 weeks) £8. Juveniles to be paid pro rata. (21/4/52.)

No. 147. Rate of Payment for work done during a Particular Period by Certain Workers Employed by an Engineering Firm near Birmingham Claim: For payment of time-and-a-half to workers who worked two days during company's stocktaking week. Award: In favour of workmen. (22/4/52.)

No. 148. Observance of Recognised Terms and Conditions of Employment in Respect of Certain Workers Employed by the Monmouthshire County Council. Claim: For observance of recognised terms and conditions. Award: In favour of workers. (22/4/52.)

No. 149. Recruitment and Training of Workers for the Skilled Sections of the File Industry. Claim: Dispute concerning method of engagement and recruitment of male workers for the skilled section of the file industry. Award: The Tribunal awarded that the terms of the draft agreements submitted by the File Manufacturers' Association to the union should constitute their decision in respect of this dispute (24/4/52.)

THE MONTH'S DATES

British Association for Commercial and Industrial Education

June

4-6 Running a Meeting (Senior management course). A. C. Leyton, B.A., LL.B. Management House, 8 Hill Street, London, W.1.

9-13 Trainers' Course. D. L. Holmes, B.A. Management House, 8 Hill Street, London, W.1.

13-16 "Training Schemes at Work." Ashorne Hill, Leamington Spa.

18-20 Running a Meeting (Senior management course). A. C. Leyton, B.A., LL.B. Management House, 8 Hill Street, London, W.1.

Institute of Industrial Administration

4 "Forging the Manpower Link." R. R. Hopkins. Fyvie Hall, Polytechnic, Regent Street, London, W.1. 6.30 p.m.

11 "Personnel—A Specialist Function." Miss A. Shaw, M.A. Fyvie Hall, Polytechnic, Regent Street, London, W.1. 6.30 p.m.

17 "Leadership." Sir Harold West. Fyvie Hall, Polytechnic, Regent Street, London, W.1. 6.30 p.m.

Industrial Welfare Society

6-9 "The Foreman Wants to Know." St. George's Hotel, Cliftonville.

10 Advisory Meeting. Leicester.

12 Course for Supervisors. Robert Hyde House, Bryanston Square, London, W.1.

16-27 "Overseas Executives Course—Human Relationships in Industry." Robert Hyde House, Bryanston Square, London, W.1.

28-July 2 "Human Relations in Industry." Keble College, Oxford.

Institute of Personnel Management

27-29 Joint Conference with Personnel Management Advisory Service, Ministry of Labour. Queen's College, Cambridge.

Institution of Production Engineers

7 "Materials' Handling." Speakers: T. W. Elkington, J. Bright, D. H. Challinor, F. E. Rattlidge. Conference Room, Olympia, Kensington, London, W.14.

National Institute of Industrial Psychology

4-5 Course for Supervisors. Bristol.

4 Supervisors Extended Course. London.

5 Conference for Supervisor Training. Bristol.

9-13 Course in Selection Methods. London.

16-17 Course for Supervisors. Sheffield.

18-19 Course for Supervisors. Hull.

18 Conference on Supervisor Training. Hull.

23-27 Course in Selection Methods. London.

30-July 1 Course for Supervisors. Norwich.

Pendley Manor

4-9 Foremen's Training Course.

Urchfont Manor

16-20 "The Human Factor in Industry." (Course for foremen, shop stewards and operatives.)

Y.M.C.A. College

3-17 Course for young people from industry and commerce.

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In every firm there is a percentage of workers who have personal problems which cause confusion and instability, and the minister was appointed to help these people in their difficulties. The minister had himself worked in factories and on farms and had served as a war-time chaplain, and was well fitted to become friend and adviser to 12,000 employees from all walks of life. At first, there was some resistance on the part of the employees to the idea of somebody "prying" into their affairs, but after two years both workpeople and management are enthusiastic about the experiment.

They Said . . .

QUOTATIONS OF THE MONTH

Duke of Edinburgh, at Swansea University College, referring to his recent visits to industry: "I found that there is a great wealth of scientific and technical knowledge which is there ready to be used . . . Secondly, I re-learned the lesson which I once learned very quickly in the Services, and that is that the quality of the work and the enthusiasm of the workpeople depend almost entirely upon human relations. The man with the best tools will not do good work unless he is reasonably satisfied with his lot, and he will only do exceptionally good work if he is happy and feels that he is making a useful contribution as part of an efficient team. Thirdly, I am completely convinced that those who say that craftsmanship is dead are quite wrong. British craftsmanship is as high as ever."

"Let Employees Share"

Sir Richard Lloyd Roberts, at the Scottish Management Conference, appealed to management to "identify itself with the inevitable, and welcome the employees genuinely as associates and collaborators in our joint industrial enterprise." In view of the manpower shortage, management must take the initiative in releasing to full capacity the existing reserves of energy.

Sir Raymond Priestley, at a luncheon of the British Plastics Federation: "A far-sighted industry will increasingly finance university education and research." Today, as never before, industry must look to the universities for men and women to train for higher executive posts and to head the administrative machine.

Sir Arthur Smout, addressing Birmingham Rotary Club: "Industry must accept some responsibility for the area in which it is located. It should be the duty of one director from each firm to live in the locality and to act as an intermediary between the company and the community."

Dame Mary Smieton, told the Drapers' Chamber of Trade conference: "We have to accept the fact that a large number of married women are permanently a part of the labour force." She gave the number of wives among working women as 300 000, or 37 per cent. "I believe that this is one of the major social and manpower problems which face us today, and which we have not solved."

Gerald Steel, speaking at Sheffield: The standard of education, judged by the requirements of industry, was lower now than before the 1944 Education Act was passed. The iron and steel industry accepted its responsibility for training young recruits, but felt it should not be industry's job to make good present-day deficiencies in education.

MANAGEMENT BOOKSHELF

The Future Depends On Human Fellowship

The Human Touch in Industry. Francis B. Willmott. Saint Catherine Press. 16s. 6d.

A FORCEFULLY written book—containing many apt and interesting case histories—which propounds the creed that only improved human relations can ensure a healthy, productive future for industry. The author is managing director of three Birmingham firms which he has built up on the principles he now sets out.

He pulls no punches. Human fellowship, he maintains, is absent from many factories, workshops and offices because of "the apathy of many employers, materialist doctrines, some aspects of trade unionism, and an undue insistence on merely monetary incentives, whose effect is infinitesimal compared with the positive effect of convincing each employee of his worth as an individual.

It is, perhaps, a pity that the channel of his argument is diverted to include chapters on "Reciprocal Trade Relations" and "Credit Trading," subjects which are hardly germane to the main theme of the book. However, Mr. Willmott makes his point with a bang, and there must be few managements in the country which could not read him with great interest and, perhaps, profit.

Overcoming Loneliness

Solitude and Privacy. Paul Halmos. Routledge and Kegan Paul. 21s.

"EVERYTHING, even individuality itself, depends on relationship . . . In absolute isolation, I doubt if any individual amounts to much; or if any soul is worth saving, or even having."

This quotation from D. H. Lawrence sums up the theme of this scholarly book. Ways and means of overcoming man's loneliness in society are explored, and recommendations made. Personnel managers, welfare officers, and, in fact, all concerned with human beings in the mass will find particular interest in the questionnaires designed to assess the sociability of the individual.

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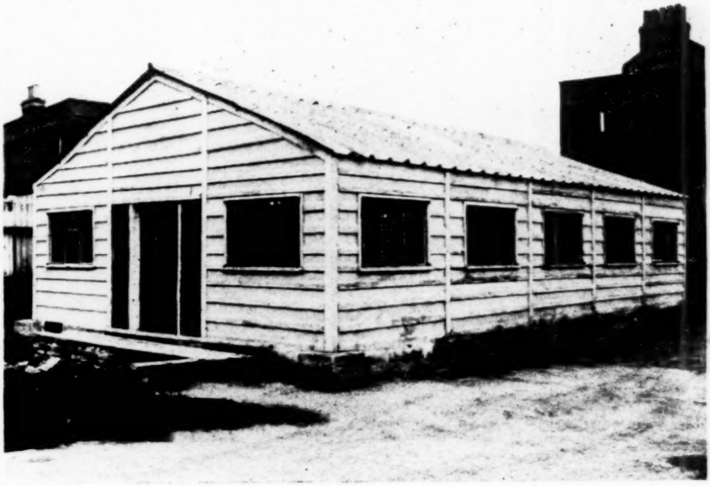

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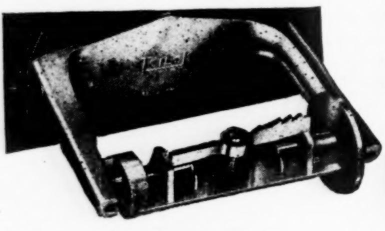

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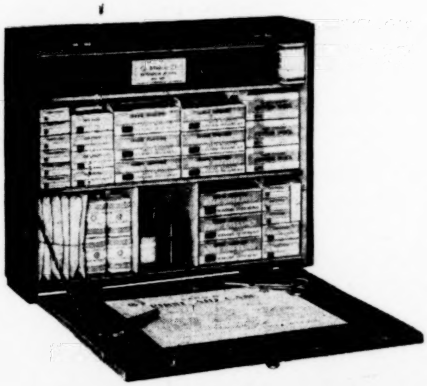

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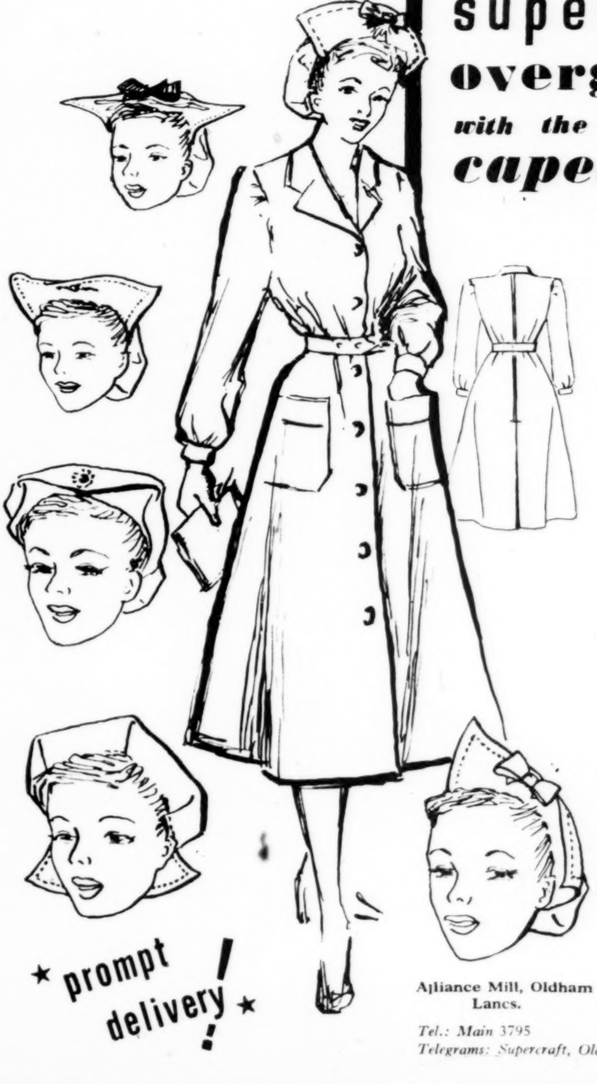

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